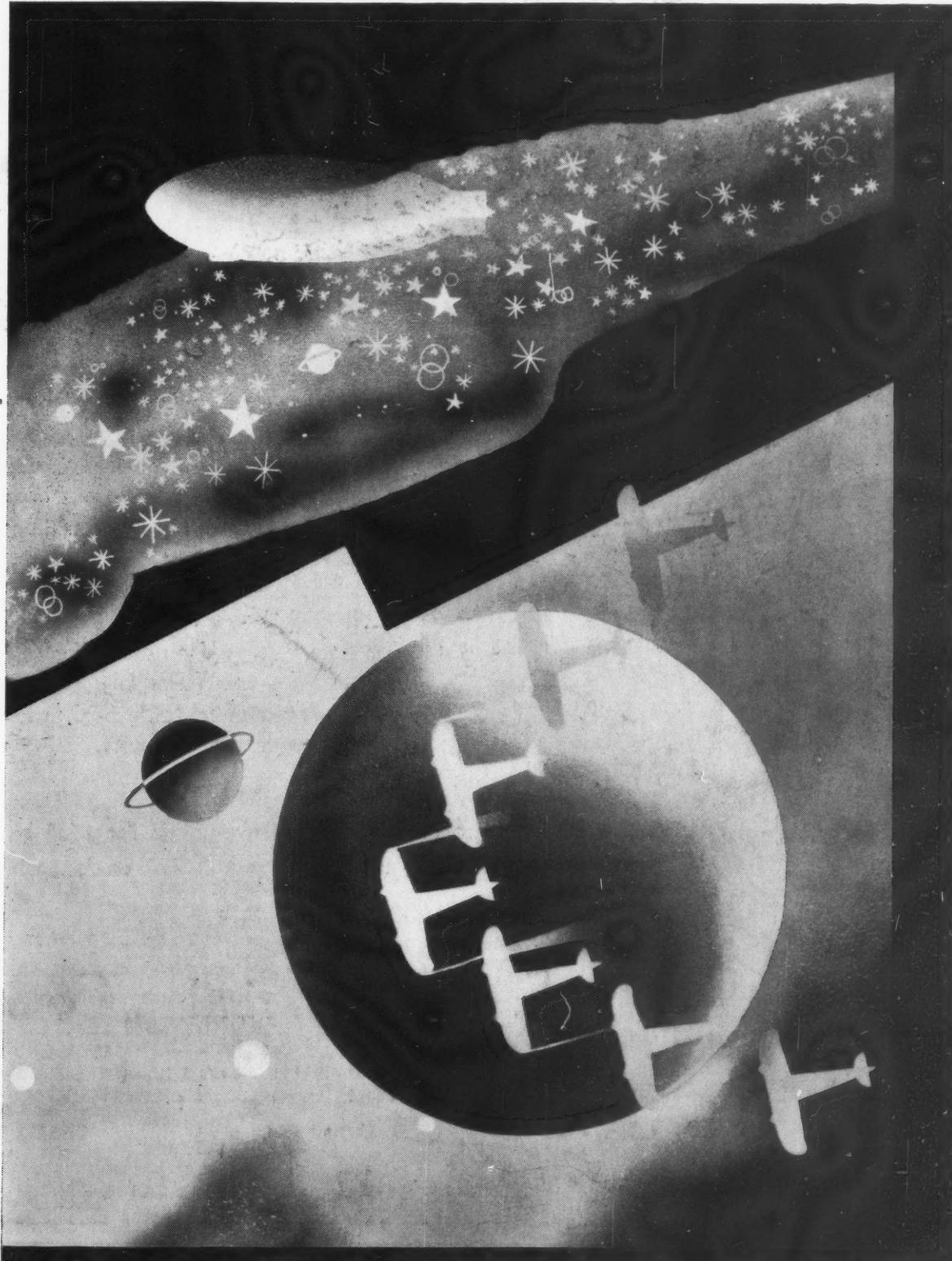


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VOL. 37 NO. 2

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DESIGN

PUBLISHED IN THE INTEREST OF CREATIVE ARTS EDUCATION

FELIX PAYANT, Editor

Vol. 37

No. 2

TABLE OF CONTENTS FOR JUNE 1935

Cover Design	Panel in Enamel by H. Edward Winter
The Editor's Page	
Margaret Bourke-White and Photographic Design in Industry	Page 3
A Century of Progress Textiles	Walter Dorwin Teague Page 7
A New Definition of Design	Burvil Glenn Page 8
Industrial Art Exhibit	Blanche Naylor Page 14
A Portfolio of Architecture	
An Ancient Art Becomes a Modern Industry	R. A. Weaver Page 30
Old Lace Landmark—A Painting	E. Oscar Thalinger Page 33
Opportunities of the Ceramic Worker in Industry	Rudolph Rosenthal Page 34
Modern Design in Swedish Glassware	Pages 36-37
An Entirely New Type Automobile	Page 39
Summer Art Activities	Page 44

PUBLISHED BY KERAMIC STUDIO PUB. CO.

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COLUMBUS, OHIO

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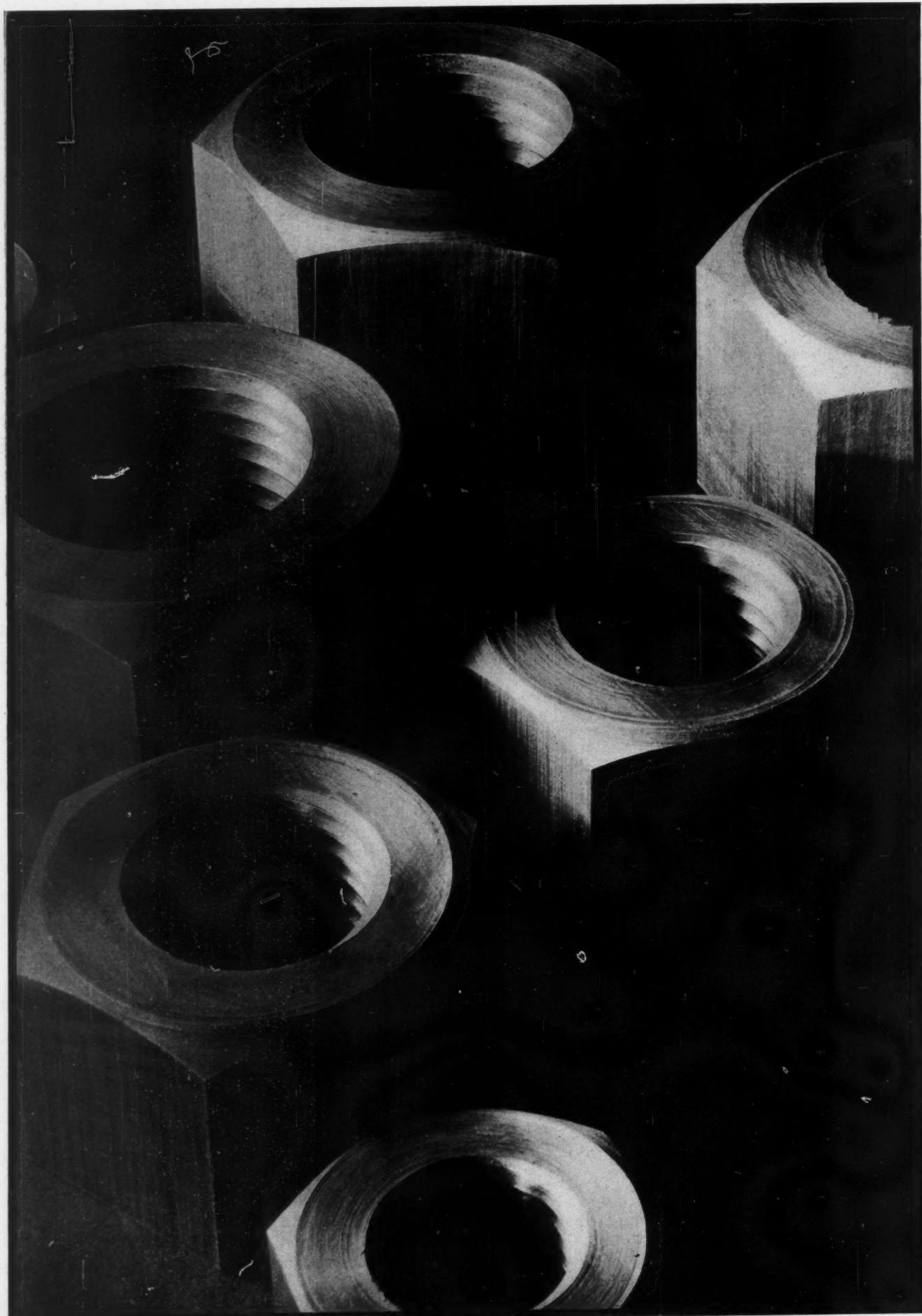
THE EDITOR'S PAGE

American industry has become design conscious and is going through a period of re-styling. The largest establishments which serve the masses were the first to discover that to keep their places in industry they must meet the demand for more art in every phase of life. It is far more significant than the former "art-in-industry" movement which meant little more than prettifying and was not basic. Mr. and Mrs. America have awakened to the advantages of good design everywhere in homes, tools and accessories. It is now evident that the producer has underestimated in the past the taste of the consuming public. He has had an inferiority complex about his products which he manifested in numerous ways, but we may now see this chapter coming to a close as good design, attuned to popular demands for structural honesty, rhythm and color, arrives on the scene to stay. These are matters that concern every person today, whether producer or consumer, artist or business man, student or professional. But above all it concerns the business man and those institutions which are engaged in preparing artists to take positions in the industrial world. Many of the largest industrial establishments are revolutionizing their plants, employing expert designers, and spending much time, effort and money to secure, if possible, more art qualities in their products. It is amazing to see what the last few years have done for those companies which sell low priced goods to the masses; art is now a necessity in business.

Art is found to pay high cash dividends, for it is the supreme quality in selling. No product can ignore it, for it surpasses quality and price in putting merchandise into the hands of the purchaser. The time will soon come when the merchant will realize that no commodity can escape the test of design. Machine-made products, quantity products, must keep step with beauty, for mere usefulness no longer satisfies. Every day finds a greater number of traditional forms giving way to a new note in color and structure. Color has improved generally and dominates the market places today. It is one of the design elements which may do more than any other to control appearance and appeal. Every motor salesman knows that it is a major force in selling cars. What design can do to build a business is well illustrated in the case of the perfume business, which was merely a matter of pleasant smells until art came to its rescue some years ago. Design made the linoleum business, and one might cite innumerable cases to show what design means in life, in production, and in marketing. It is demanded in the life of all classes in America in all products. In short, design is now a major industry in America. If industry is to be the next patron of art, after the church and after the state, industrial leaders and product designers need to be attuned to it in all its manifestations. If art has come to the dishpan, the coffee pot and the kitchen sink, certainly our younger generation must know more about it, either through the home or the school. If American culture is to be fully realized by an identification of art with the fabric of life, further understanding is in order. Now that art is no longer an idle gesture and highbrow occupation, it will find its own vitality; it will be "of the people and by the people."

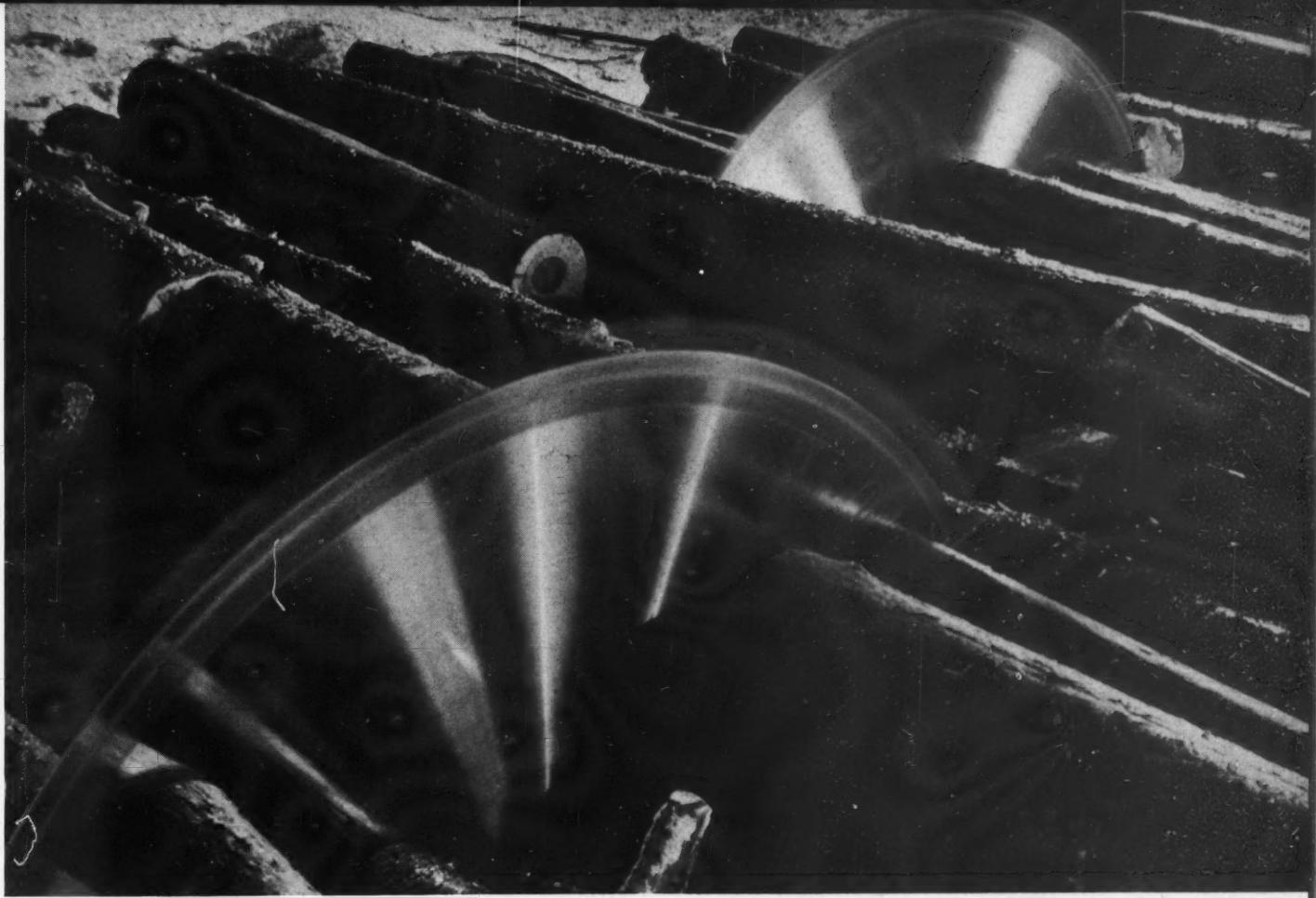
Henceforth each month will find a good share of each number of our magazine devoted to significant examples of changing attitudes of industry toward design. We invite all persons and organizations concerned with understanding the new place of design in industry to co-operate by sending us material for discussion. Heads of schools where an awareness to this situation exists are invited to participate. If we all co-operate by adjusting ourselves to this new situation, much good will result.

Felix Payant



MARGARET BOURKE-WHITE

NUTS



MARGARET BOURKE-WHITE

SAWS CUTTING THROUGH LOGS

MARGARET BOURKE-WHITE AND PHOTOGRAPHIC DESIGN IN INDUSTRY

It was quite by accident that Margaret Bourke-White chose industrial photography as a career. As a child, factories always fascinated her; it was to her the greatest treat when, on a Sunday, her father took her through his factory.

When she grew up and entered Columbia University, she expected to become a biologist. However, she also took a course in art, and in order to round out the design part of this, she enrolled in a school of photography.

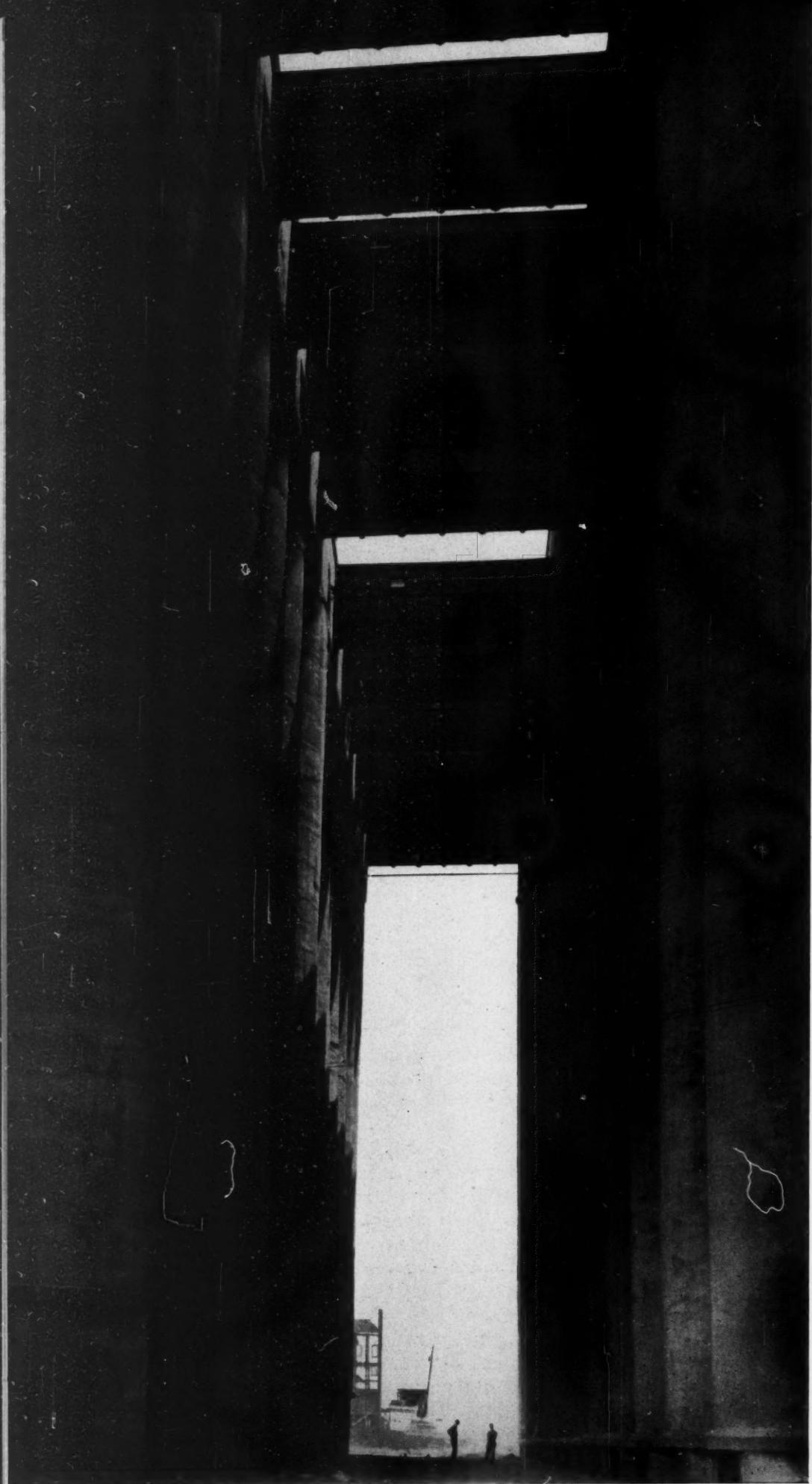
Later on she went to Cornell to study philosophy. While she was there her father died and she had to find means of supporting herself. She found that selling photographs of the school campus and buildings was a pleasant way of earning her living. When she graduated she kept on taking photographs. Her first clients were architects and banks, and before she knew it industrial photography had become her profession.

Miss Bourke-White feels there is an almost unlimited field for an industrial photographer. The profession is

still in its infancy, but photographs are coming to be used more and more for commercial and illustrative purposes. This work, she feels, requires a great deal of patience, and she used to photograph anything that interested her just for the sake of experimentation.

Miss Bourke-White feels the aspiring photographer should perhaps try still life objects first, and later tackle action studies. It is necessary to go through quite a bit of trial and error before one gets the desired effect. Wood should look like wood; concrete should have the texture of concrete; and stainless steel should shine like stainless steel. Miss Bourke-White has always kept records of such details as exposure, aperture, time of day, quality of light, and other influencing factors. She always takes any one subject in many different ways.

The industrial photographer must have a definite feeling of design; he must harmonize ideas and forms. It is not enough just to make good photographs. The subject under consideration must be studied thoroughly, and the relationships between objects, such as



MARGARET BOURKE-WHITE

GRAIN ELEVATOR

Here Miss Bourke-White has captured the drama evolved by the engineer who was not in pursuit of an architectural idea but designed this magnificent structure with a view toward the most efficient functioning in its performance of duty.

EGYPTIAN TEMPLE

This hypostyle hall in the Temple of Karnak shows the dignity achieved by simple masses so ordered as to function as architectural members. Comparison with the illustration of the American grain elevator will show the same principles.



RALPH FANNING

size, shape, texture, dark and light, should be carefully taken into consideration. A decision as to the importance of the various objects will help in locating the point from which the best shot can be made. At all times great care should be taken to exercise the utmost judgment in selection of the composition, the choice of materials within the space allotted by the negative, and the arrangement within that space.

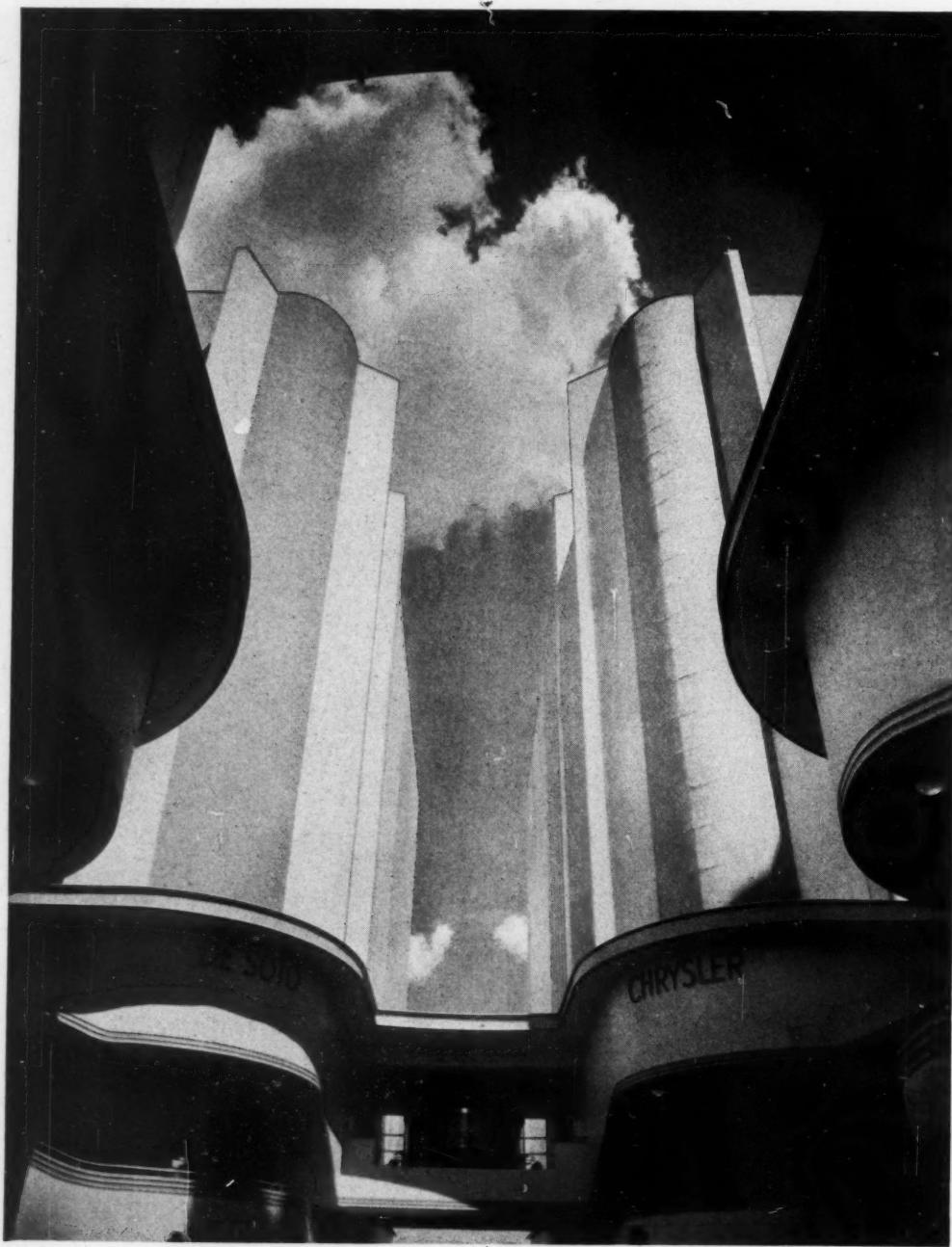
Then the photographer must have patience; he must be willing to give himself plenty of time. The novice, trying to get just the effects he wants, will undoubtedly lose money on his first jobs. Every job must be his best in order that his work grow and his reputation increase. Fair pictures should be discarded. Miss Bourke-White has taken shots that she knew would "pass," but when she thought that by spending a few more days she would get a better picture, she has taken even as many as a hundred additional in order

to get just what she wanted.

The photographer must have tact and common sense, and be able to make friends with people. Merely knowing photography is not enough. He must have the cooperation of everyone, from the President of the concern and the foreman to the workmen who help set up the apparatus and the men who pose for the shots.

The industrial photographer must be strong and not afraid of hard work or uncertain hours, and he must be ready to work under unusual and even dangerous conditions. He may have to stand on a crane, a freight car, the top of a ladder; perhaps he may have to hang from a rafter or lie in the snow to get just the proper shot. It is all a part of the work.

In this industrial age, if one understands the industry of a people, one comes close to the heart of that people.



COURTESY OF THE ARCHITECTURAL FORUM

CHRYSLER BUILDING

This view looking up through the cruciform hall gives an interesting perspective, one provocative to the designer. Compare this with the textile designs on the opposite page.



FREDERICK BRADLEY

A CENTURY OF PROGRESS

Three of a series of silk patterns designed by Walter Dorwin Teague for Marshall Field. The designs were inspired by the architectural motifs of this Exposition. Left to right: Science Tower, Flying Buttresses, and Sky Ride.

A NEW DEFINITION OF DESIGN

By BURVIL GLENN
Supervisor of Art
Piqua, Ohio

Design as a factor in art now has a new functional significance, the importance of which has been generally overlooked in the recent past. There is a change in the attitude of the general public toward design, and this has resulted in a new concept; therefore, a new definition of the word "design." Society has placed new demands on it and industry has provided new methods. The point of view toward the machine as a tool has changed; hence a new type of construction. New forces are dominating our lives and combining to emphasize the important place of function; all of which give design a broader meaning. The home with its accessories, the use of the machine in industry and the theatre all present areas of art of vital importance to our daily life. A close study of these three show how they are constantly changing as a result of the forces applied to them, changing in such a way as to dramatize the aesthetic qualities of their functions.

Civilization now is particularly restless and is demanding reforms in all phases of life. The world seems to be in a turmoil resulting in demands by the people for "new deals" every where. On every hand we are not only shocked by riots and strikes signifying unrest in industry, but in a less dramatic way art also seems to feel this upheaval and make its demands. In the world of art there are being made many adjustments of our ideals. Nowhere is this change more pronounced than in design, where we are emerging from a period of misconception of its true meaning. A fight against over-decoration is being waged. This seems to signify that no longer will the public accept the inferior, but demands a reconstruction of its standards in what constitutes good design. Consequently, because of a widespread education on the part of the public, a change in the standards of living, rapid communication and transportation, along with many other social factors, there has arisen an active and wide interest in the significance of the meaning of art. The word design has come to mean more than the mere decoration of objects already constructed. Designers have been demanded in many fields which formerly had been closed to them. There has now arisen a tendency to have them not merely decorate completed objects, but to plan the construction of objects themselves. In almost every field of art where once the elements of good design were sadly neglected, there is evolving a noticeable change in the artistic qualities of the article produced.

Design has been taken off the high shelf upon which it had been placed by a misunderstanding and misguided generation of the past and placed in a position

where it can now be used and enjoyed by everyone. The public which used to think of design and decoration as being synonymous are forcing decoration to take its proper place, subordinate to construction. Now they are both working toward the fulfillment of a definite function.

Instead of taking such devices as stenciling, painting, carving or other processes used in the embellishment of surfaces as their objective, society demands that the construction of articles be made to fit a definite purpose in life and to express good taste in line, mass and color. In the construction of the object, "use" is thought of first; any decoration which is added is subordinated and is added to enhance the use.

Along with this change in the objective of design there has developed in the minds of the public an awareness that art is playing a very important part in everyday life. More interest is taken in it and a greater appreciation of its elements has developed. So great has the interest become that the quality and value of a product is now judged by the quality of its appearance. The public realizes that the best products on the commercial market seek and use the best available designs. Good design is now the paramount factor in merchandising.

That the plan of present day articles is different from those of fifty years ago is no hard matter to understand. When art becomes an important part of the lives of the general masses, products had to become different. They had to be such that they could be understood and appreciated by the masses. Like all changes made by mankind there is the tendency to go from one extreme to the other; to sweep as far away from the design of the past as possible. So we see in the startlingly new lines, the beautifully plain surfaces, bold colors and daring materials, a desire to swing completely away from the over-decoration of the last generation. The new designs were first seen as a revolt against the old ornate "art objects" of an insincere art period during the last of the nineteenth century. Honesty in design is sought for now rather than insincere over-decoration. Good designers are not trying to replace piece by piece the old designs with new ones, but rather begin by eliminating the unnecessary, clumsy and poorly designed objects which had cluttered up the lives of the people. Designing today means mainly a process of eliminating.

The recent changes in design do not mean that the original elements and principles are changed, but rather mean that these elements and principles are used in a somewhat different manner. All works of art are built around a plan and this plan is called de-

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The manner in which the designer now considers his problem as a whole is shown at the right. Not only is the bottle relabelled, the tube restyled and packaged in a new box, but the display form is made to harmonize with them as a unit. They were designed by Karl Bolander for the Luthol Research Laboratories, Columbus, Ohio.



R. E. TRUBEE

sign. Certain principles of the plan of art objects do not change, but remain constant in art for all times, thus the principles of design used in the construction of a canoe by primitive savages are similar to those applied by modern architects to a skyscraper or by an industrial designer to the wrapper of a tin can. These principles which form a universal plan for all art are: certain aesthetic qualities, a pleasing relationship of materials and a suitability to function. Good designing is arrived at only by achieving a unity of these factors. The aesthetic qualities which make up a design include rhythm, balance, dominance and proportion. They act as controllers of line, mass and color. Rhythm leads the eye through all the details of design. Balance imparts to it a sense of equilibrium or repose and harmony gives to the various elements employed some common factor. All of these are dependent upon proportion which holds them together to form a unified and well organized whole.

In addition to the aesthetic qualities there are others which a design must have before it is complete. Things

may be rich, pretty, stylish, elegant and in addition have all the aesthetic qualities and still lack the essential elements of good design. This is only attained when the worker fashions materials to conform to his own needs and ideas. The beauty depends on thoughtful design, fine craftsmanship and intimate sympathy with and understanding of materials that will give to the results a character peculiar to the material. The suitability of the construction to the function it must perform is of the greatest importance. It may have all of the other qualities which make for good designing, but if it does not suit the purpose for which it was made then it cannot be classed as good. Any effort to achieve beauty by ignoring the demands of adequate service to the last detail, must be condemned as misdirected effort.

These characteristics are permanent qualities which are found in all art of all ages. There are, however, some characteristics which are not permanent. This change is called style. Examples of style are found in such periods as Louis XIV, Colonial, Roman and Mod-



EMELIE DANIELSON

VICTORIAN

The room to the left is characteristic of the gay nineties. The furniture, although the product of the machine, was designed to duplicate the work of the craftsman with its elaborate carving. It was designed not so much for comfort as for the unnatural deportment and posture considered proper then. This reflects the spirit of the time and presages the great reaction soon to take place.

ern. It is the plasticity of character caused by style which enables designs to be vital to everyday life. Only as long as this continues to be effective will designing of a high order be maintained.

Good designs are within the reach of everyone. Many manufactured objects now show the effect of this new definition; likewise, architecture, sculpture, painting, commercial art and other expressions are finding their places in everyday life more than ever before, because of the awakening consciousness of the functional significance of design. Everywhere educators are sowing the seeds for this new outlook by teaching the basic principles in the new light and by making art fit a definite function in the educational life of the child through experience with the arts rather than by dictation. Keen competition of manufacturers in the search for new decorative ideas conforming to the new definition and the ever increasing use of design in daily life has caused the public to become design conscious. It is easy for them to see how unreal was the art of the past generation and how necessary is the realization of what our contemporary design expresses.

New Demands on Design

Throughout all of the art periods of history there have been various demands set upon design. This has been due mainly to geographical conditions, limitation of materials and the limitation of knowledge. In present times a new set of demands seems to overshadow those of the past generations—demands which are closely linked with the function of the art object. The limitations set up by the barriers of transportation have been removed. No longer must the designer use materials which are close at hand. Speed in modes of travel has made available numerous materials which hitherto were restricted to certain localities only. Costs of shipping freight have been reduced so greatly that now there are few sections of the world where entry of materials is barred because of inaccessibility. Costs of mining and production of raw materials have been lessened because of new inventions and discoveries. This makes available more materials than ever before.

The constant development of new discoveries has made the variety of materials appear as endless. Many



EMELIE DANIELSON

TRANSITIONAL

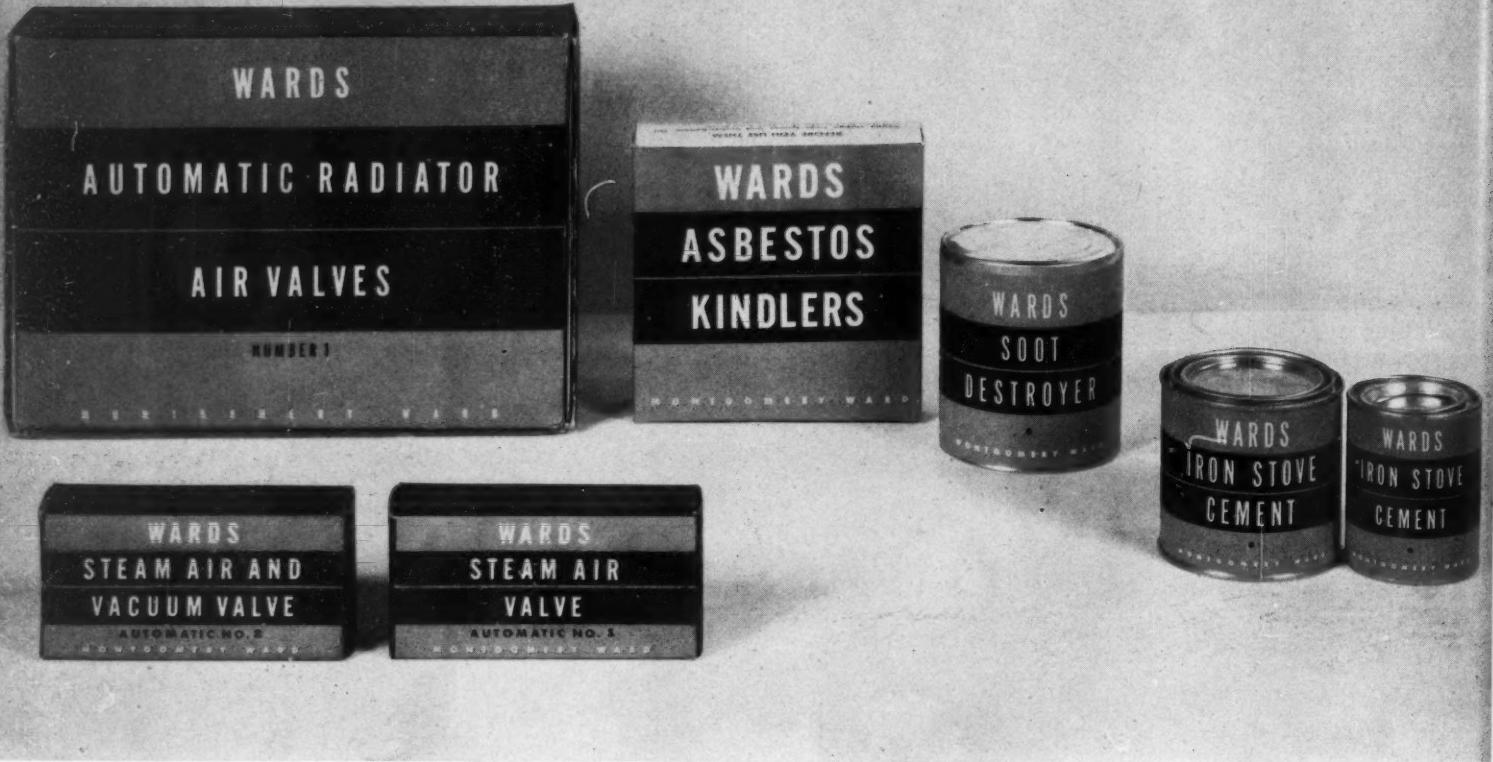
The color values and arrangements at this time were still agitated. The various articles were individual, consequently too costly for the average person, and the room as a whole lacks the unity of the one shown below where all the pieces were designed with relation to each other. The photograph is shown here through courtesy of Home and Field.

CONTEMPORARY

The room below was designed by John Wellborn Root for Montgomery Ward and was shown at the recent American Industrial Art Exhibition at the Metropolitan Museum of Art. The colors, quiet and restful, and the harmonious relation between the various units make the room one of repose. It is to be noted that all the pieces shown are in production bringing the price within the range of the person of average income.



COURTESY OF THE METROPOLITAN MUSEUM



The development of design in the mail-order houses is most significant of the changing public taste. Montgomery Ward is in the midst of unifying its products. These two photographs show the Stove and Furnace Accessory packaging. The lower is the old form carried under Ward's name and other manufacturers' names. The upper is typical of the simple horizontal banding and simplified design generally held to throughout the plant. In this case black bands are used on a red ground with white letters.

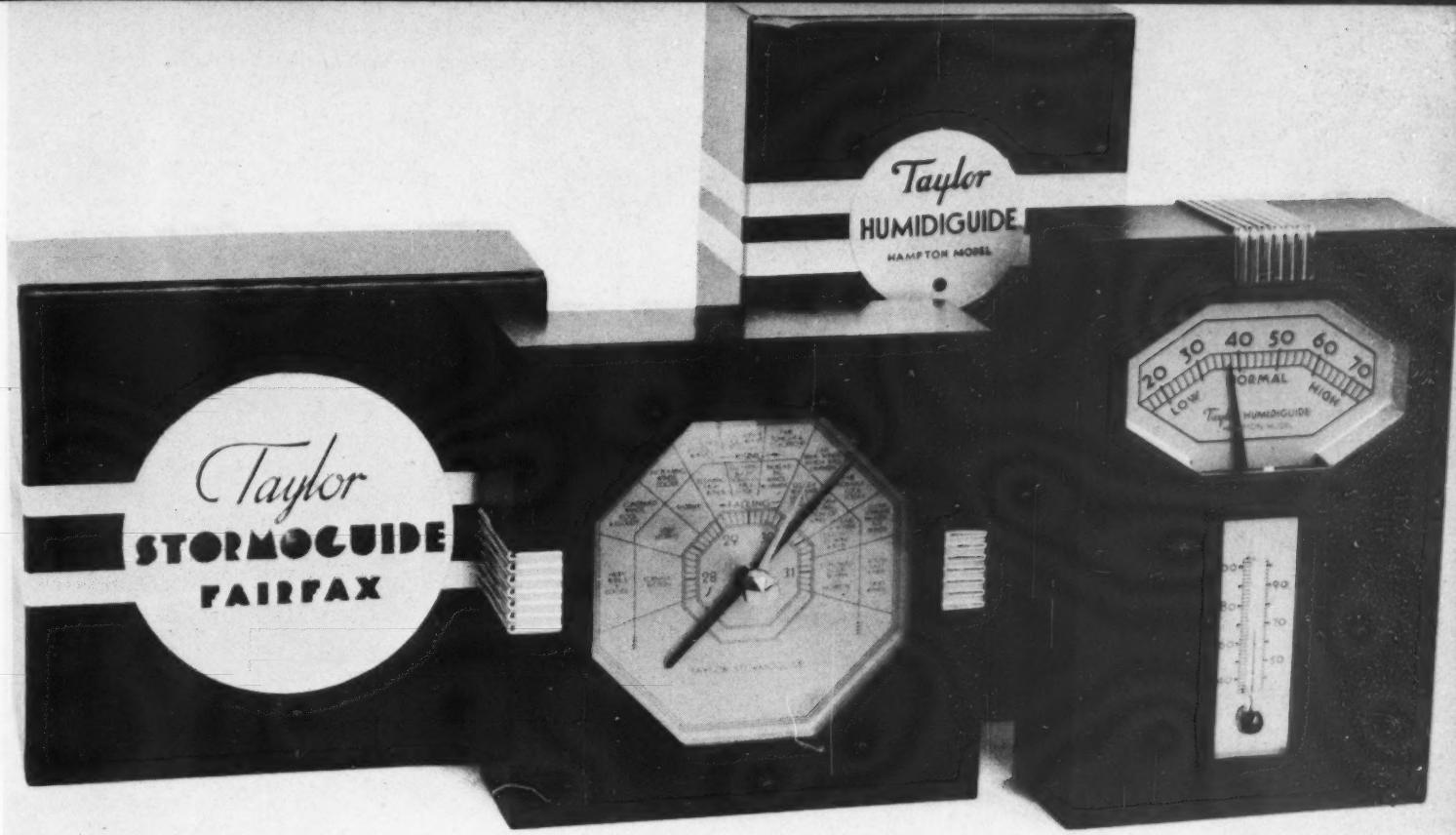


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FOR



JOHN T. MOSS

Stormoguide and Humidiguide and cartons designed by Walter Dorwin Teague for the Taylor Instrument Companies. The instruments are executed in Bakelite and chrome-plate, and the packages are in the Taylor "family" style of black with circular labels of silver supported by bands of silver and vermillion, also of Mr. Teague's design.

materials are now standing idle awaiting use in the present day as well as later on when the demands of society will be such as to include their need. These materials simply wait for the ingenuity of the designer to plan some use for them. Cellophane, steel, durillium, chromium, wood with its many by-products, all offer broad fields for experiment in solving the needs for bettering social conditions. Research workers in industry are salvaging many products which in the past have been thrown away as waste. This is one of the demands placed on designers today to put to use waste products, and so, many articles which have served their purpose in one field must be made to serve a purpose in another. The originality and ingenuity of the designer are taxed on this point. He must see to it that the designed article fulfills to the utmost the function it must perform.

The knowledge of materials and uses has increased in recent years. Experiments using materials in as many ways as possible have been carried on, resulting in many revolutionary changes in construction. To meet the demands set up by the flood of new inventions and materials there has been established a new order of design. In architecture many things which have been thought of as standard in home buildings are being discarded. Steel frameworks for homes, new shapes, new locations and new lines for interiors are fast becoming common to us mainly because of the

many inventions created through the desire to better human living conditions. Home furnishings have also responded to the new inventions with new methods of designing. The use of metal in furniture and many other articles formerly made of wood has changed the construction of these objects and has also made it necessary to discover new designs for them in order to make them best fulfill their functions. It is up to the designer to keep art alive by keeping the designs in pace with the development of the best uses for materials.

MACHINE ART

One of the most important influences on design has been the use of the machine in industry. The machine is the exponent of mass production and articles made by it are no longer hand made. The designs turned out by the machine are influenced by the shapes of machinery, for machine art is not only produced by the machine, but its design is inspired by the machine. It is logical that a machine will have its greatest success in creating in its own image; consequently, the use of the cone, cylinder, spiral wheel and other mechanical shapes are interpreting nature in a new way as the motives of machine design. Articles to be made on machines must be planned in such a way that they do not exceed the powers of construction of the ma-

See page 42



AKRON PHOTOS

INDUSTRIAL ART EXHIBIT

By BLANCHE NAYLOR

The extent to which manufacturers have joined with designers in producing everyday industrial art to beautify the average American home is fully shown in the tremendous National Alliance of Art and Industry exhibition which was opened to the public on April 15 in the huge galleries of the Rockefeller Center Forum, in New York City. The space occupied by the comprehensive showing of all sorts of practical, useful and well designed objects is more than forty thousand square feet, and the aggregate number of visitors and interested spectators is estimated at two hundred and fifty thousand people from widely separated and remote parts of the country as well as those in the great metropolis and its environs.

The entire project was originally planned and has finally been executed to demonstrate the needs and requirements of the average family in the way of ordinary living devices as well as the more purely decorative features.

Divided into groupings under the heads of Housing, Household Appliances, Transportation, Communication, Fabrication and Leisure, the display serves to indicate the variety of interests, occupations and amusements which keep the typical American home and its individual members in rhythm with the latest

advances in science and art as well as serving to display such utilitarian and practical ideas as the most recent developments in lighting, heating, ventilating, air-conditioning and every sort of servicing. Room settings and special arrangements of the best new work in home interiors are attracting an especially large share of attention. Each component part of the modern home is treated independently, in varying types of living rooms, dining rooms, kitchens, bedrooms, et cetera. The best of modern design in this field is shown interpreted in new materials. Many "before-and-after" contrasts show the tremendous advances which have been made in recent days in the designing and re-designing of special units to increase the efficiency as well as the charm of modern homes and offices. The National Alliance give as their definition of the purpose of this large exhibition the wish to first "bring before the public the outstanding accomplishments of American industry; second to show how these industrial projects improve living conditions and make for fuller lives in the lower income groups; third, to encourage experiment and the use of new materials in industrial production, and fourth, to demonstrate that beauty and utility are now determining factors in the minds of all types of consumers."

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A modern silver beverage set is shown above. It was designed by Alfons Bach for Keystone Silver, Inc. On the opposite page is an interior in which is grouped the work of several different designers shown at the recent Industrial Art Exhibit in the Rockefeller Center Forum.

This worthy object has been accomplished, and the great majority of displays are concentrated on objects intended for the average family of moderate means. Not so long ago all new design implied an accompanying large expense,—not so with efficient designs in proper materials for mass production. Charm at a price is available today for those who could not afford it in the past.

Many of the leading industries of the country are represented. All sorts of machines, appliances and new inventions which have a definite effect upon modern life are shown, and the displays have been created and constructed by leading designers, interior decorators or engineers. This is the first sufficiently large exhibition to utilize all of the available space in Rockefeller Centre, with a complete visualization of things demanded by today's consumer.

The most important thing which designers have had to learn is the ability to correlate their work with the possibilities of the machine. Constant effort in the direction of creating objects best suited for their function has developed in both manufacturer and designer the ability to select the qualities of varying materials most suitable for the particular purpose. Skilled designers now produce plans in co-operation with man-

facturers, and progressive minds in both branches of the production find that the future holds even more promise of closer co-operation, in the preparation of products which meet the needs of the American consumer.

A "Pre-View of Prosperity" is the phrase which has been used to describe this exhibition, and it is a large panorama of ideals in the making of homes for tomorrow. Economical in cost, attractive in appearance, the designs shown here are fine examples of the modern work, produced, selected and shown by outstanding authorities in their respective fields. Prefabricated houses and sections are being produced in increased quantities. The furniture used in these, the floor coverings, the combinations of utility features planned by experts, all are developed to the fullest extent in harmony with modern life. Compact, efficient, all the objects shown reveal the power of the designer to beautify everyday life, whether in the larger implements, such as the house heating units, or in the small sweepers, sewing machines, washers, electric clocks, china, glass, silver, pictures, curtains, lamps, mirrors, radios, the excellent results achieved by the functional approach, and the streamline finishes are obviously great improvements over past designs.

Among the most important trends in American life today is the development of new occupations, amusements and special recreational features for leisure time, which of course is a direct result of increased efficiency in labor-saving devices.

One of the most prominent, in fact the main and central display in the Forum exhibit is the large scale model of Broadacre City, a plan as conceived by Frank Lloyd Wright, famous architect, of what the city of tomorrow will be. Highly simplified traffic systems for high speed transportation, special facilities for air travellers, the decentralization of industry in combination with small farm units, all give to low income groups the same advantages which only the really wealthy have in the past days been able to enjoy. Extensive development of play facilities are stressed, and the dispensing of education so arranged that it suits the convenience of parents and children.

The decorative angle of the exposition has been in charge of noted decorators. Uniformity and appropriateness has been achieved by the use of a general background in various shades of soft gray against which the various displays stand out clearly. Special cases of natural wood contain many of the articles shown, and these are accented by a different color on each floor, giving a striking contrast of three bands of bright color seen from any vantage point. Sufficient space has been used to retain the completely uncrowded effect so necessary to the proper showing of either related or unrelated objects, and the entire plan has been reduced to the greatest possible simplicity of form so that the design and color of the individual exhibits is thus emphasized.

Since the entire exposition was planned with the need and demands of the typical consumer in mind, various individuals who might make up the absolutely typical American family have been chosen, and three major awards along with a large number of minor ones are decided by popular vote in a general voting contest participated in by all visitors to the show. A special Average Consumer award selected by a jury of 100 average consumers is made. Another award is made by a committee of experts who judge exhibits on the basis of standards of excellence for design, utility, durability and cost.

Such a collection of livable rooms illustrating the best in modern design is certain to have a definite effect upon the consuming public, and students of design watch carefully the reactions of that Average American upon whom the success of any new idea eventually depends.

A group of several outstanding designers have banded themselves together in opposition to the National Alliance and issued a challenge and antagonistic comment on the methods of the organization this year. Just before the opening of the exposition this group issued a statement announcing that they had refused to join this year's display.

This statement follows: "The National Alliance of

Art and Industry was organized a few years ago with the avowed intention of promoting good design in manufactured products. A number of designers, the undersigned among them, cooperated in the hope of encouraging the Alliance avowed intention."

"However, after observing over a period of years its deviations from its original aims, we have come to the conclusion that it does not promote the best standards of American design, and we have declined invitations to participate in the current exhibition at Rockefeller Center."

"We believe that the Alliance neither stimulates better design, represents the artists, nor improves the relationship between the designer and industry."

This statement was signed by Egmont Arens, Donald Deskey, Henry Dreyfus, Norman Bel Geddes, Lurelle Guild, Gilbert Rohde, George Sakier, Walter Dorwin Teague, Walter von Nessen and Russel Wright.

The tremendous exhibit was opened with an elaborate ceremony incorporating all the latest advances in the field of science. President Roosevelt pressed a gold telegraph key in the Oval Room of the White House and so started an electric impulse that set off some hundred flash bulbs in the great Forum, turned on many floodlights, sounded a siren, dropped an American flag and began the playing of an electric organ by turning on the current. Thus he opened the Industrial Arts Exposition by proxy. Mayor La Guardia made an opening address, stressing the fact that industrial art covered all useful arts in every walk of life, in the shop, the home and the office.

In comments on the special display of new housing an address by James A. Moffett, Federal Housing Administrator, was brought from Washington, relayed on a special beam of light. He pointed out that well-designed, scientifically constructed, and carefully decorated homes are the focal point of any nation's success and prime factors in the promotion of human happiness. Frank Lloyd Wright, well known pioneer modern architect, added to this the statement that an architect should see life as a solid structure taking outward forms from interior conditions. He believes that by study of man's needs and all sane human requirements governments and homes can best be built for long service. Further speech was made by Clinton Bardo, president of the National Association of Manufacturers. He emphasized the fact that art in industry is a stimulus to the purchasing wishes of the public these days, and believes that good design is a powerful ally in industry's struggle for recovery. Manufacturers, he states, have everywhere turned to design as a strong and important element of sales appeal, and appearance in every new product and every old one as well has become a potent sale factor.

The manner in which the various collections of industrial articles are shown is an art in itself. Ensemble effects in all interiors, the bringing together of appropriate furnishings in an equally appropriate

See page 43

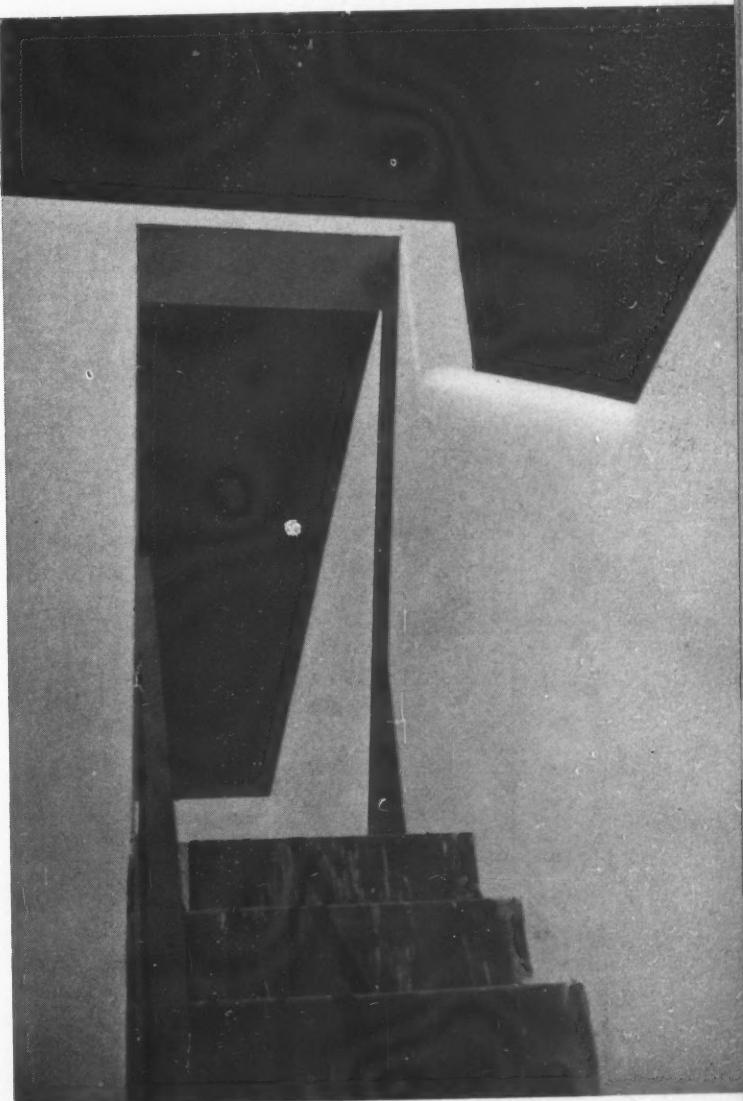
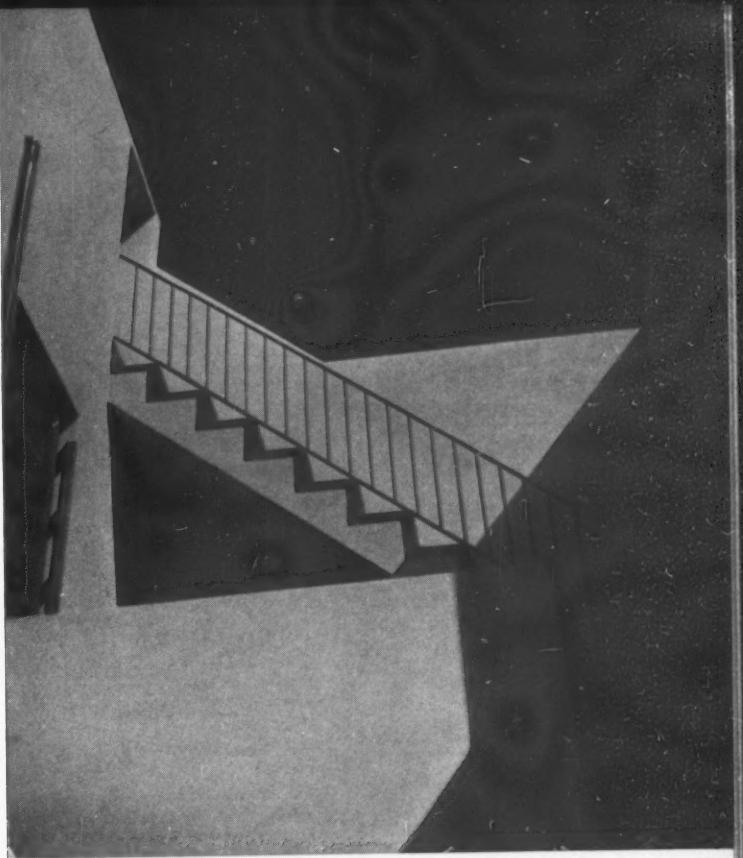
ARCHITECTURE

FOR JUNE

17

A PORTFOLIO OF ARCHITECTURE

- Throughout the ages architecture has remained the noblest achievement of man in the plastic arts. In it are embodied fruition and culmination of all the hopes and aims, the joys and sorrows, the realizations and frustrations, the creeds and ideals, of various peoples. It is inescapably the register of the culture of any time or civilization, "the product determined by an attitude as inevitably as a bunch of grapes is the result of the vine from which it springs." In it are clarified the reactions of man to his time and environment.
- The compelling need for architecture has always been the same—that of enclosing space, excluding the elements but admitting light and air. In order to accomplish this there must be a roof and for all but the most primitive structures, partitions, windows, and chimneys. As a structure becomes more complex functionally it also becomes more complex in the organization of its masses. The refinement of these masses and their relation to each other transmutes the enclosed space from amorphous voids into active and significant volumes.
- "There is more in architecture than meets the eye." Architectural style is more than mere variations of appearances, the reasoned development of organic building, the logical outgrowth in various building materials of a pattern of thought. To be true to itself architecture must announce unhesitatingly how it was made, why it was made, and of what it was made. There is something which surpasses deceit in a building which proclaims itself to be supported stone upon stone when in reality the stone is but an encasing shell hung upon a steel skeleton. Our cities are crowded with such structures, built by men who concern themselves with only outward appearances. But these are rather stylists than architects.
- The wonderful possibilities of our new building materials—steel, concrete, and glass, to mention but three—should revolutionize the art of building. As yet they have been but little realized. Then, too, there are the new motives for building, new needs for our commercial and industrial requirements, needs that are unique in the history of man. It is unthinkable that the factory emulate the Gothic Cathedral and the apartment house duplicate the Roman Basilica. Many years ago Louis Sullivan made his famous axiom, "Form Follows Function." Our new needs in building and the new materials at our disposal are factors which are motivating new architectural forms. That more and more architects are becoming aware of these needs is evidenced by the increasing number of structures erected to fulfil them. In the following pages will be found examples in which the architect has, to the best of his ability, given utterance to these needs in the materials at his disposal.



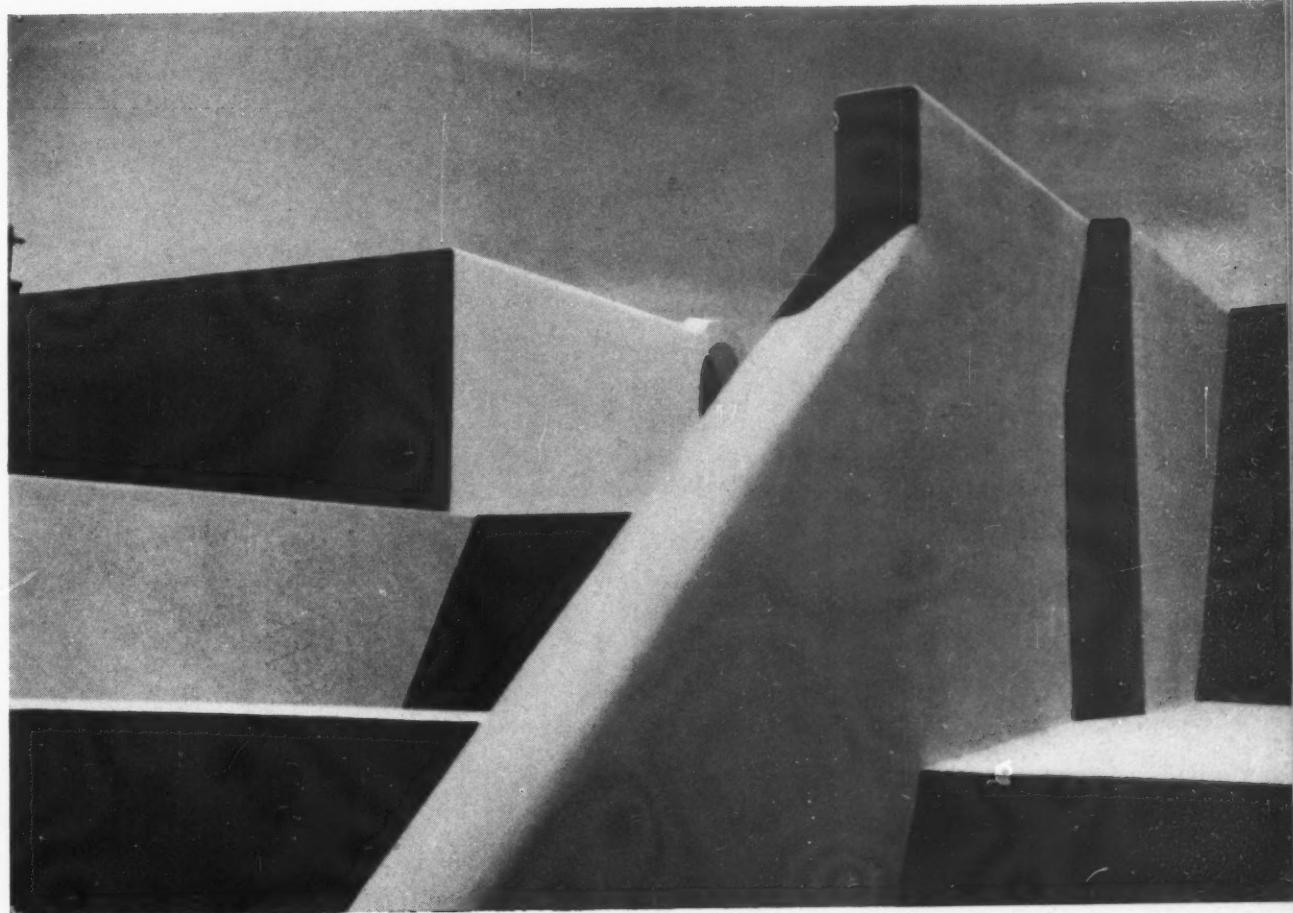
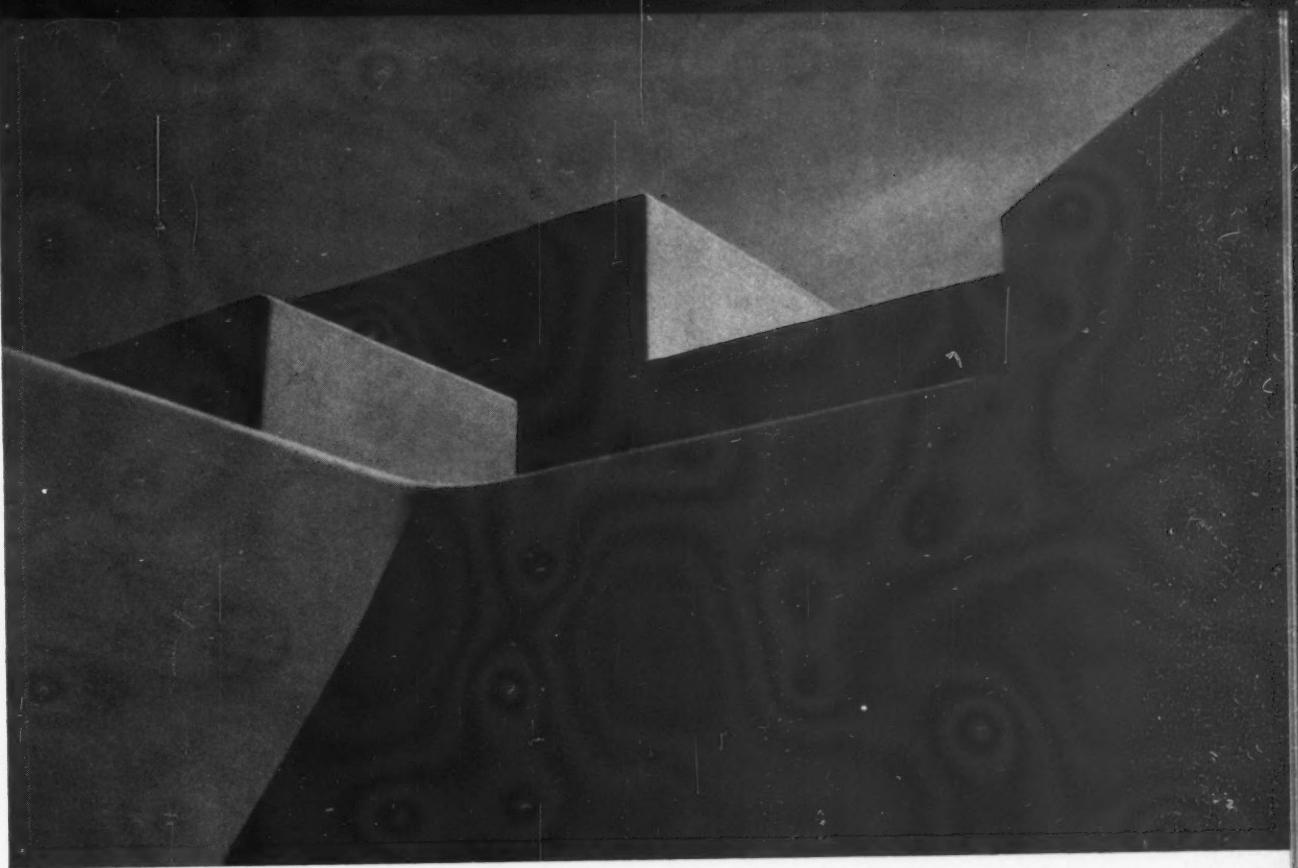
CONTEMPORARY MEXICO

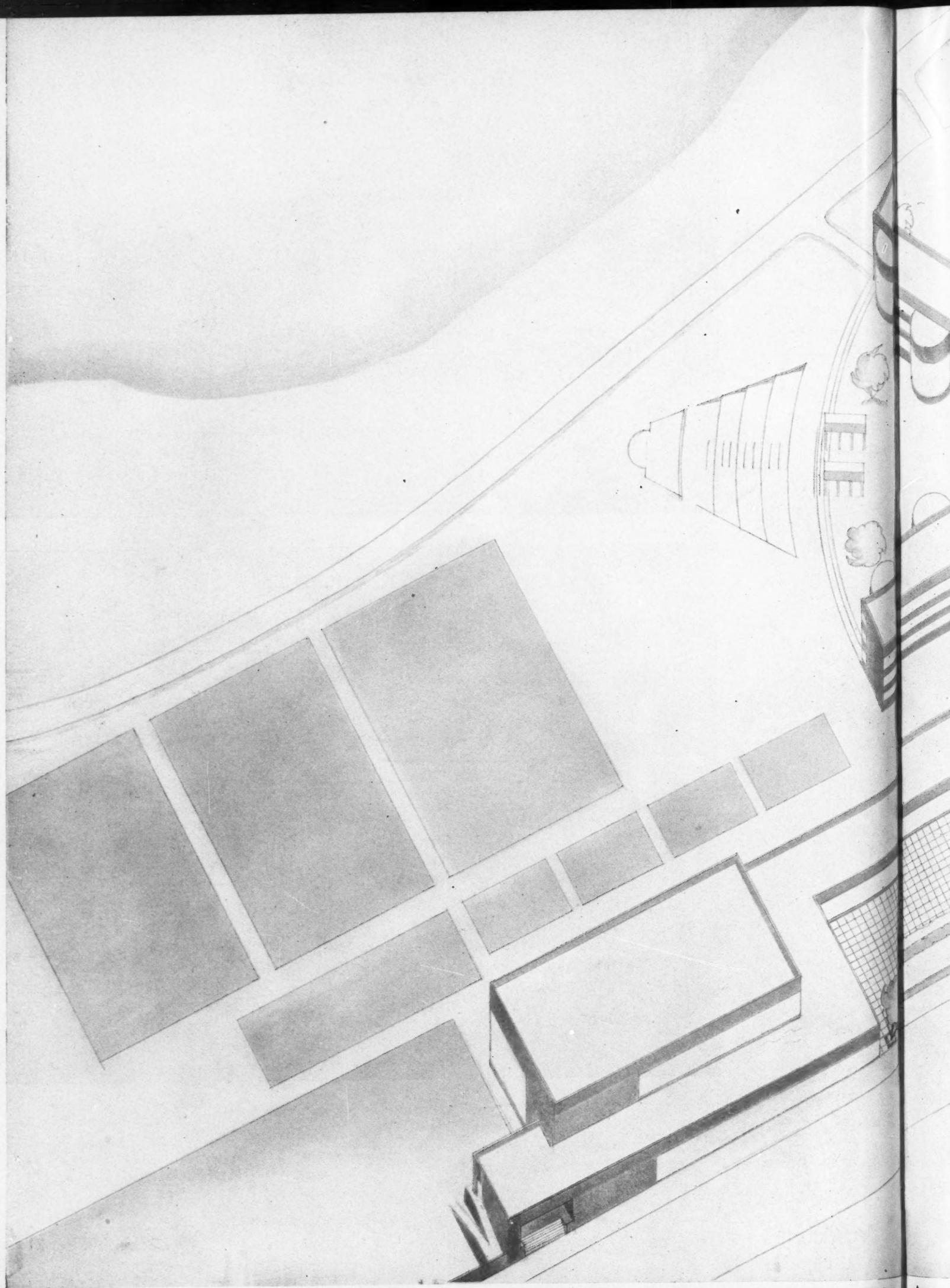
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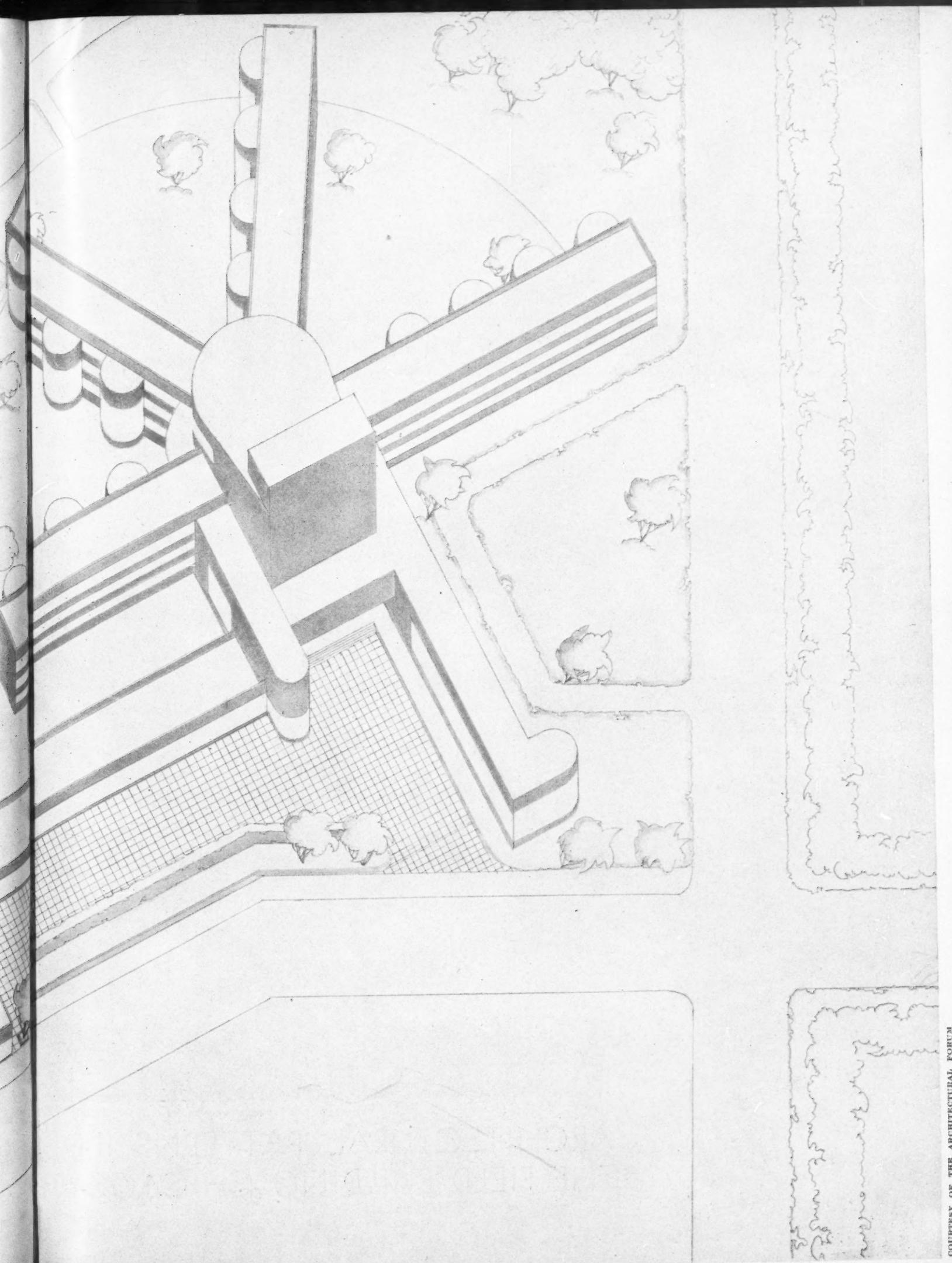
ARCHITECTURE IN MEXICO

These three illustrations and the two on the preceding page are typical of the work of the Mexican architect, Luis Barragan. The restraint of detail and emphasis of masses and architectural members are noteworthy features. The photographs were taken by R. Salcedo Magana. They are shown by the courtesy of The Architectural Forum.

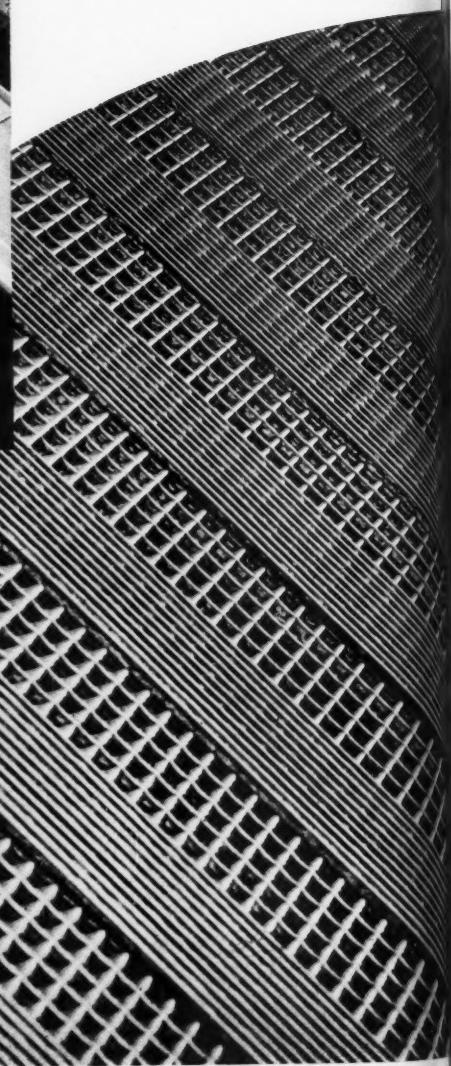




A MODERN PLAN FOR A MODERN HIGH SCHOOL



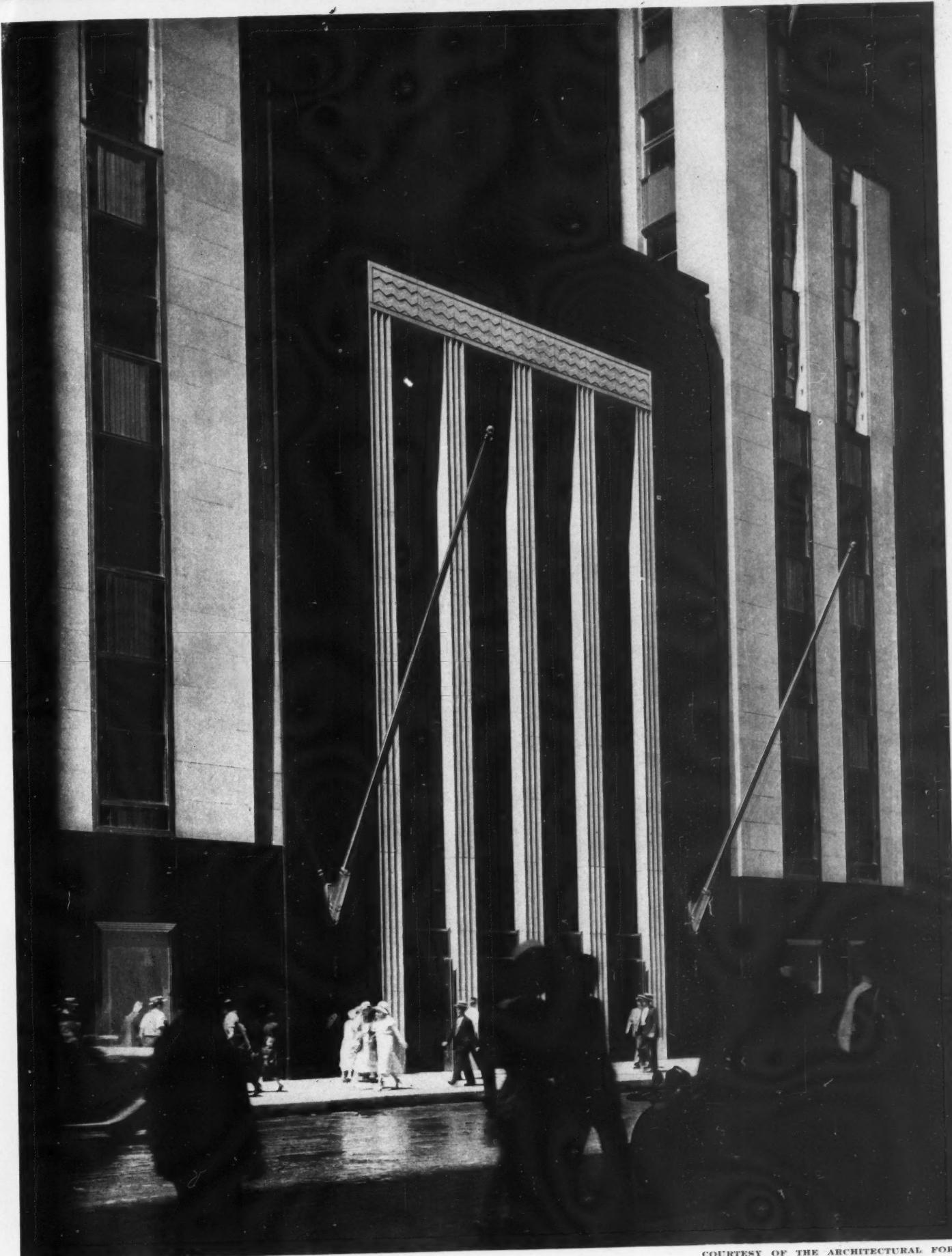
OL A MODERN COMMUNITY BY WALLACE K. HARRISON



COURTESY OF THE PRESSED PRISM PLATE GLASS COMPANY

ARCHITECTURAL PATTERNS IN THE FIELD BUILDING CHICAGO

DESIGN

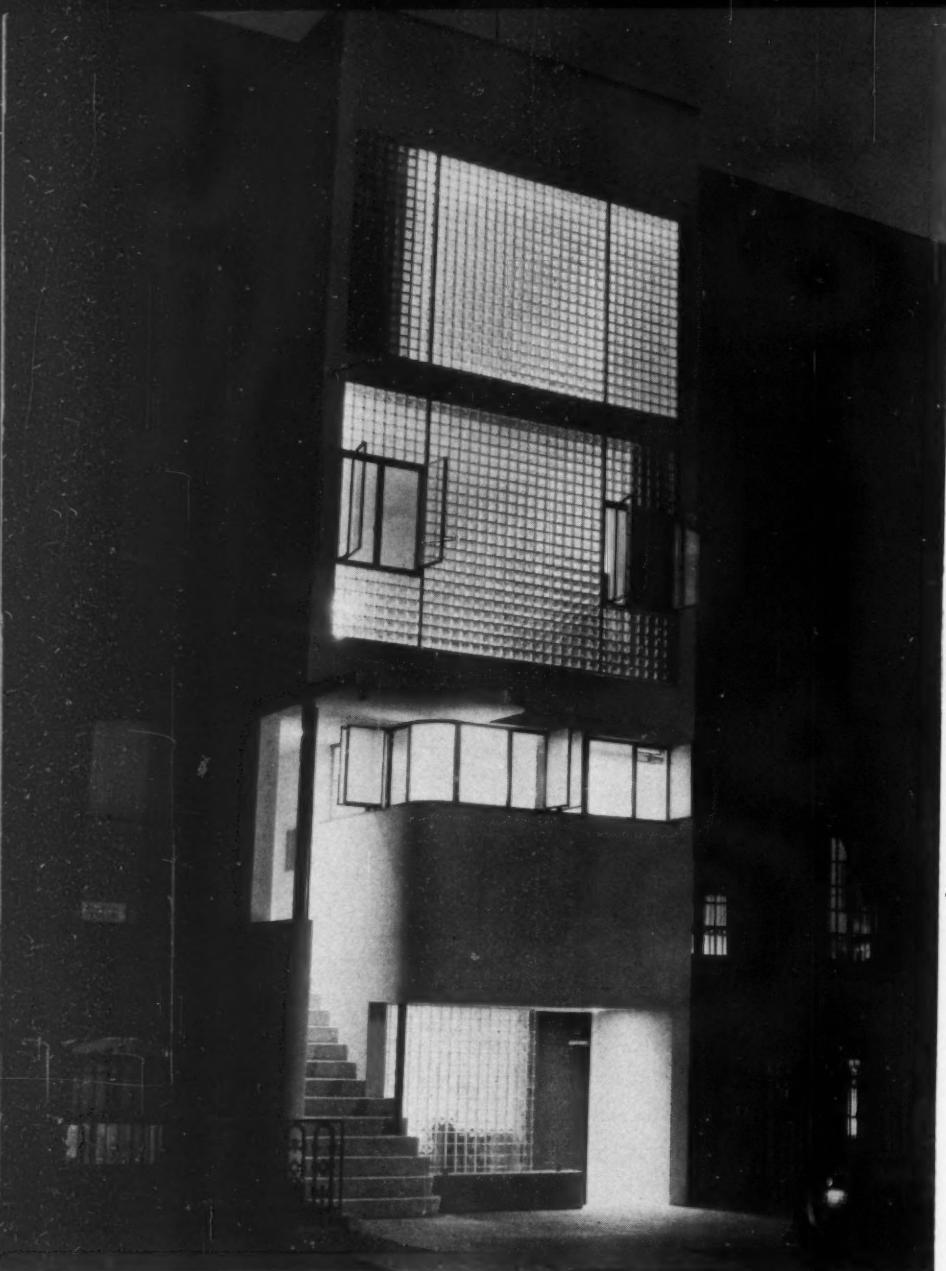


COURTESY OF THE ARCHITECTURAL FORUM

THE FIELD BUILDING CHICAGO

FOR JUNE

25



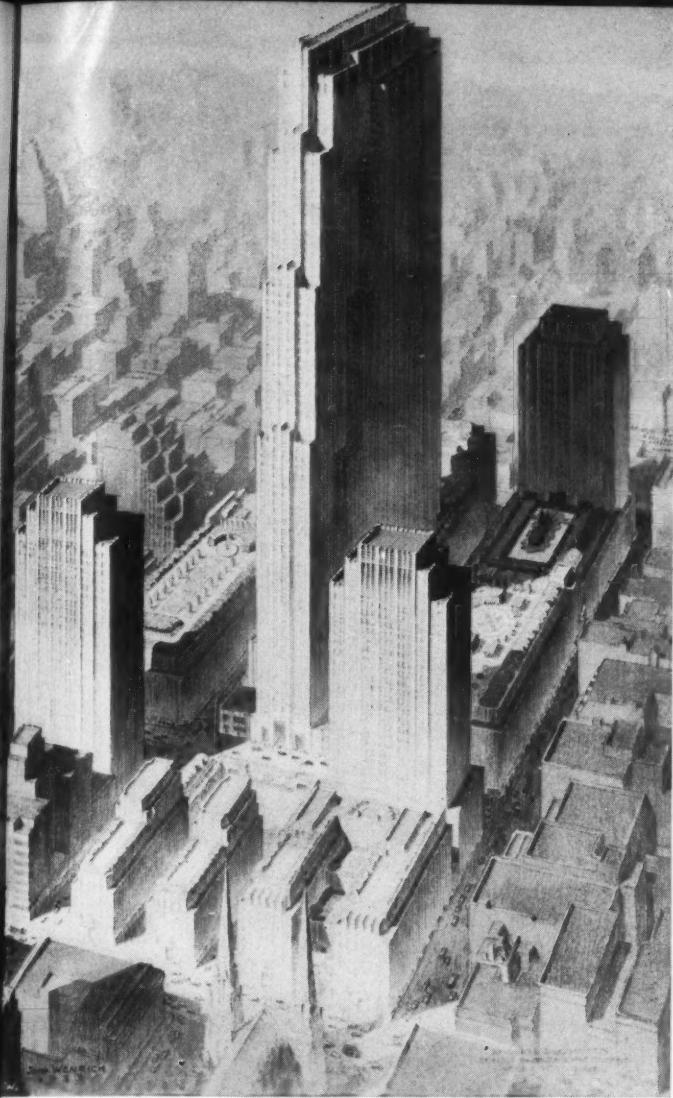
AN ARCHITECT'S OWN HOME

To the left is the house of William Lescaze, the architect. It is an interesting and informing piece of design showing what can be done in reclaiming the old brownstone front in New York City, bringing it up to the standards set by the outstanding contemporary architects. Below is a view of the dining room illustrating the harmony between the interior and the exterior of the house. Both these photographs are shown through the courtesy of The Architectural Forum.



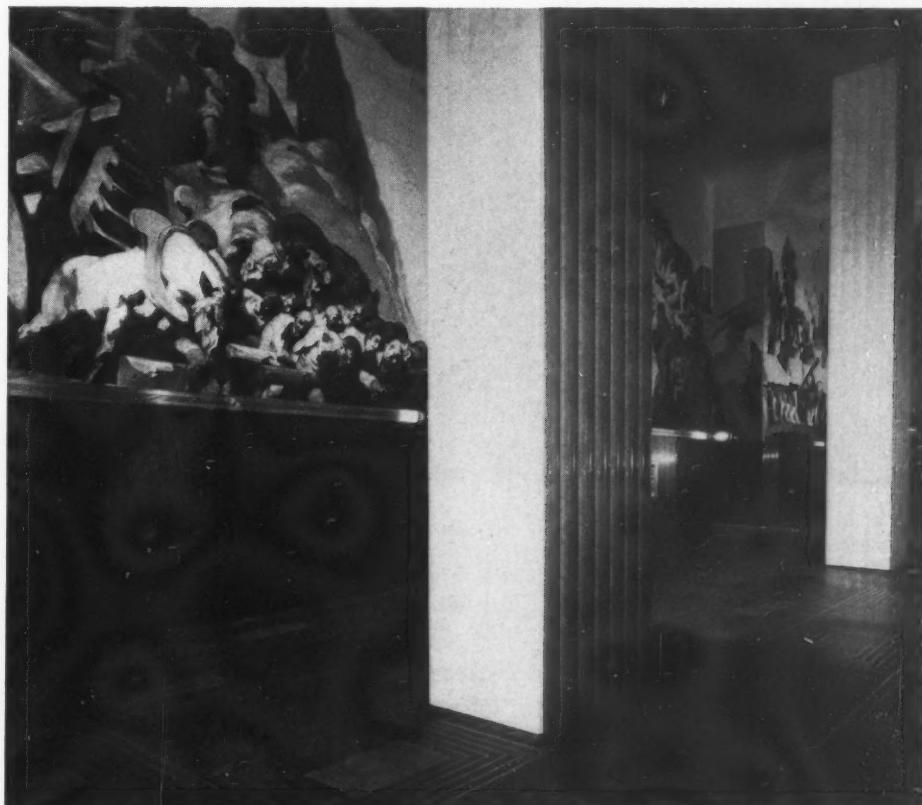
PHOTOGRAPHS BY RALPH STEINER

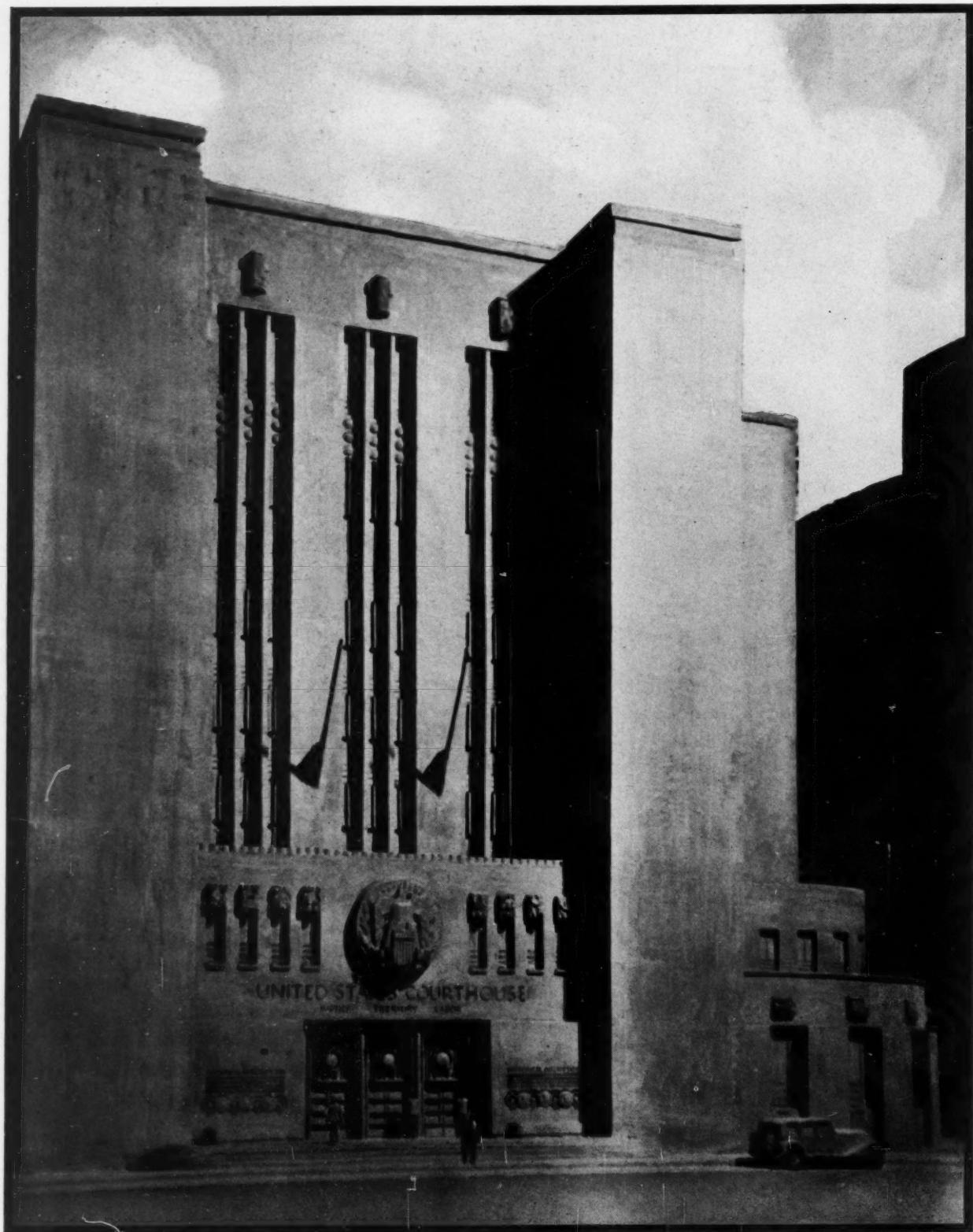
DESIGN



RADIO CITY

An early architectural rendering of Rockefeller Center revealing how the development will look when completed. This tremendous project is characteristic of our time and is the largest and most unified piece of planning in the architectural development of America. Below is a corridor of the Great Hall of the R. C. A. Building with the four murals of Jose Maria Sert.





COURTESY OF THE ARCHITECTURAL FORUM

NEW TREND IN FEDERAL BUILDING

This preliminary model for the Federal Building in Philadelphia shows an interesting recurrence of the rectangular motif both in plane and solid form.



COURTESY OF THE ARCHITECTURAL FORUM

INTERIOR OF YARDLEY'S SHOP ROCKEFELLER CENTER NEW YORK

A view from the mezzanine toward the entrance. The circular rug enclosed by a brass frame was designed and executed by Loja Saarinen. It is recessed into the floor which is of pink Tennessee marble inset with cast brass motifs. The shop is characterized by fine materials perfectly executed, and a delicate restraint appropriate to the merchandise.



The illustrations accompanying this article are the work of H. Edward Winter, schooled in enameling at Vienna. His designs are developed directly in the medium and consequently retain the freshness lost in preliminary drawings. The panels are three and a half by five feet and are for architectural use. On the opposite page the illustration shows the reception room of the Ferro-Enamel Company with three panels installed.

AN ANCIENT ART BECOMES A MODERN INDUSTRY

By R. A. WEAVER

A logical development of this story would start with the history of the Porcelain Enameling Industry as an Art. The Industry did start as an Art, but its origin is so clouded in antiquity that it is almost impossible to be very definite regarding it.

It is unfortunate that we don't have an authentic story of the early history. You will remember in your school books the old story of the origin of the roasting of pork. A modest Chinese home burned and unfortunately the family pig could not escape. The resulting appetizing odor indicated that a new culinary dish had been born. We've also read that glass was accidentally discovered when a hot fire built in the sand produced a glassy substance. Perhaps, without stretching your imagination too far, the author can go one step farther and find another Chinese home burning. In the charred remains some inquisitive Oriental finds his beautiful glassware has melted and deposited a fine glaze upon brick, a piece of pottery, or perhaps a metal vessel. This may be the way in which our Industry started.

In considering the history, we can assume that many of the divisions of the Ceramic Industry developed

side by side. I will be somewhat specific regarding only one of the divisions, that of porcelain enameling.

The material which we call enamel, preferably porcelain enamel or vitreous enamel to distinguish it from baked-on enamel, was not mentioned in literature, as far as I can discover, until the ninth century, where we find in the life of Leo the Fourth a reference to the word "smaltum," a Latin word which comes down directly to our own use of the word "smelt." In this case it describes a hard vitreous compound which was fused upon the surface of metallic objects.

The word enamel comes from the French "emaille," and is rather loosely defined as an "opaque glass, the shade of which can be varied at will."

The enamel, being a vitreous compound, can not be more antique than the discovery of glass. Josephus claims this discovery for the Israelites. We have much indisputable evidence, however, that enameling was done many centuries before the Birth of Christ.

The actual art of enameling is probably of Western Asian origin. Gold ornaments and enameled jewelry, made in ancient Egypt and Assyria long before the Birth of Christ, can be seen at the British Museum or



ALBERT DUVAL

at the Louvre. In a discussion with a Chinese antique dealer, I learned that at least five hundred years ago there was a flourishing industry in China built on the imitation of antique enameled pieces. Can you imagine having a business of imitating antiques five hundred years ago? If so, you can understand the difficulty and confusion at this time in trying to trace original histories.

From China, enameling undoubtedly travelled to Egypt, Greece, and then on to Rome, and from Rome to Great Britain.

The original work was done by artists and craftsmen of the highest order, and most of the objects were religious in character. The fine museums of Europe are filled with glorious examples. To me, the most interesting hall in the Louvre is the throne-room of Louis the Fourteenth, now filled with beautiful pieces of antique enamels.

One of the finest pieces on display in this hall is the shield of Charles the Ninth. This is done on gold and the coloring is absolutely exquisite. It is about two feet high, the colors red, sea-blue, bright green and flesh. A battle at sea is pictured—the colors as fine

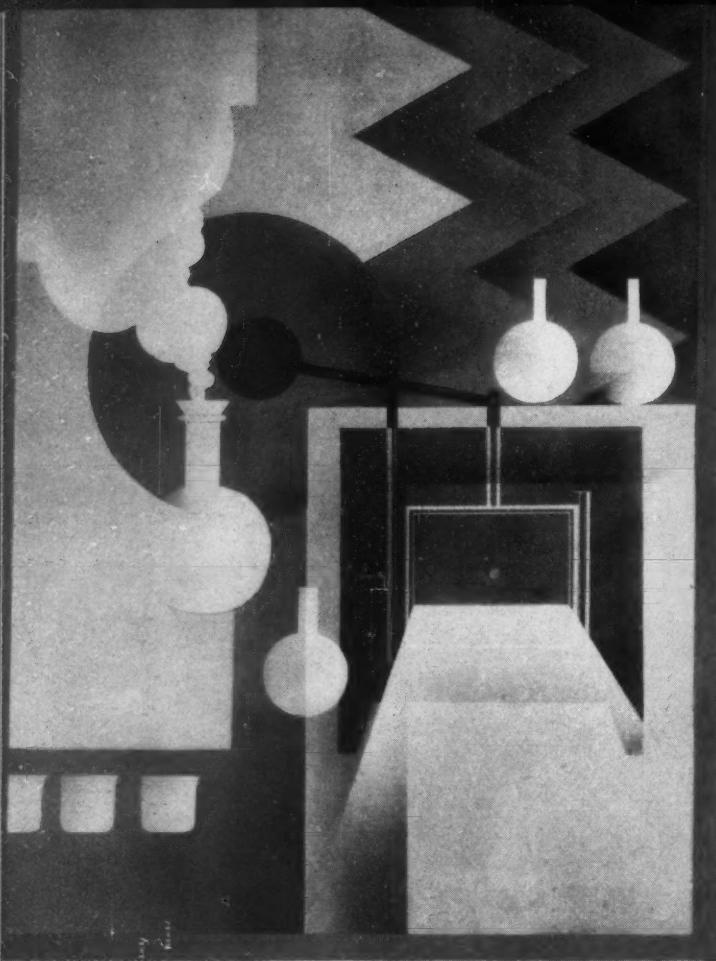
as any today. It must have been done by a master. In a nearby case is a lovely bowl which is thought to have been done by Cellini. In this same display are many items of various periods, dating from the fifth century on.

In the British Museum, one of the most distinguished examples is a Celtic shield which was found in the Thames, and which is still a beautiful piece of work after two thousand years' subjection to the ravages of this brackish river.

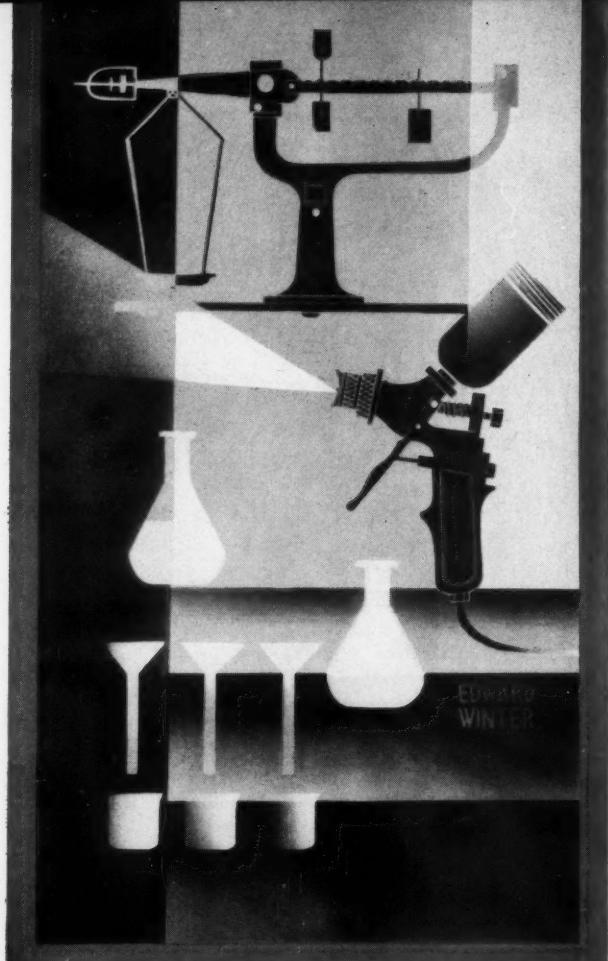
The history of enameling is quite naturally intimately bound up with the various types of enameling with which we are familiar.

Roughly speaking, there are six types, Cloisonné, Champlevé, Basse-taille, Plique-a-Jour, Painter's Enamel, and Miniature, which might more properly be called Industrial Enamel.

We are all familiar with Cloisonné, which has become a mass-production proposition with the Japanese and Chinese. In the hands of an artist, however, this type of enameling creates a most beautiful effect. Most histories indicate that this was a method used by the Byzantine School. The design is formed by soldering



Two of the panels of H. Edward Winter depicting in a semi-abstract manner articles from a laboratory equipment. They were made for the reception room of the Ferro-Enamel Co.



thin partitions, called cloisons, upon a metallic background or base. Afterwards, the compartments thus formed are filled with enamels of various colors. In effect, the colors are separated by a delicate filigree of gold or copper. In the Metropolitan Museum of Art there is a small case showing six vases in the various stages of being enameled in this manner. In my own collection of porcelain enamel antiques, I have a similar assortment.

The next school of enameling, called the Champlevé, produced a method which eliminated many of the difficulties encountered in Cloisonné work. They simply took copper plates and hollowed out cavities for receiving the enamels, the raised parts remaining indicating the design. This simpler and more economical method flourished at the same time in the Rhenish region and at Limoges.

Limoges, at that time, began to take its place as the most important city in the history of enameling. Previous to this, work had been largely in the hands of the monks. Beginning about the thirteenth century the monastic workshops were supplemented by civil workers, and from that time on the cathedrals of all Europe, from Seville to Stockholm, were decorated and enriched by enamels from Limoges.

We will leave Limoges for the moment and note that

in Italy, during the fourteenth and fifteenth century, the third type of enameling was developed, which is called the Basse-taille, or Translucent school. Here the artist first carved his subject in low relief. The carving, usually in silver, was then covered with translucent enamel, which after fusing was level with the uncarved part.

The next development, though relatively unimportant as far as number of pieces produced, was the Plique-a-Jour, which was a combination of Cloisonné and Translucent. Although unimportant numerically, this school has produced some of the most beautiful of all enameled pieces. The divisions are made with small metal strips, but there is no metal base. The enamel is divided only by the metal strips. Hold this to the light, and you will get the effect of cathedral glass.

The next development in enameling was really the beginning of enameling as we know it, and was developed to a large extent in Limoges and flourished at the end of the fifteenth century. At this point we begin to have dated pieces with really authentic history. This school of "enamel painters" used, as a general rule, a coat of enamel and a firing to correspond with each color; the outlines were made with an etch-

See page 41



PHOTOGRAPHED BY ROBERT KROLL

OLD LACE LANDMARK

By E. OSCAR THALINGER
City Art Museum, St. Louis

OPPORTUNITIES OF THE CERAMIC WORKER IN INDUSTRY

By RUDOLPH ROSENTHAL

Many things which happened this year, particularly in the last few weeks, lead to rather definite conclusions. With the ending of the depression a regular rebirth of the Applied Arts has taken place. A rapidly rising demand will undoubtedly provide all the incentive necessary for the creation of artistic work in the small workshop as well as in large industries.

As a whole the public taste keeps constantly improving, demanding new and better merchandise in the stores. They will, under present conditions, search for it mainly in the home market. And where there is a demand there will be no long waiting for the supply. The standard of our production is bound to be raised rapidly and the time is approaching when we will not have to be ashamed to compare the quality of our work with the best of foreign origin.

Of course it is necessary to remember what Europe achieved in the last twenty-five years or more in the Decorative Arts, not what it has done in periods long gone by. Europe built up its own art on what it saw and brought home from the East. Soon this circle will be closed, however, and perhaps a reverse movement may start from now on. It is not so long ago, since Europe was, as far as the Decorative Arts were concerned, very decadent. Industrialism had caused terrible havoc in the arts and crafts. Some could tell vivid stories about the seemingly hopeless struggles small groups of artists, craftsmen and writer who took up their cause, had to experience. They were trying to break the wall of indifference of the public to contemporary art. The writer was in England, Austria, Germany and France at the time and knew many of the pioneers of the new movement.

In judging any art period we must, of course, consider the economic background. Until after the French revolution the enjoyment of art was made the privilege of the ruling classes only, except for its public display in architecture and in the churches. The rest of the populace was permitted distant admiration but not ownership. An art for the masses, whose material means and culture grew rapidly, had to be created. This could only be done by quantity production of quality. Of course most of this mass production is still terrible, but if anything it is worse in Europe than here. Certainly many know of the bad taste in the homes of the middle and working classes in Europe, not to except part of the aristocracy and, of course, the Nouveaux riches. Look for example at the house furnishing floors of a Paris department store. It is a fact that the average American home is in better taste. Less space and

more frequent moving do not permit such an accumulation of poor taste.

What will this new demand in the Decorative Arts mean to the ceramic worker? It means more than ever that he has to work in the spirit of the time, that he has to create what the new generation wants. This changing taste in the Decorative Arts is of course brought about by complex causes. The Fine Arts—painting and sculpture—in their contemporary trend, play probably the greatest part. Next comes architecture—again influenced by the changes in our way of living. And not the least part is played by fashion, advertising and the movies. Forms and colors, which in the past would have seemed incongruous, become familiar and enjoyable to look at. Others, again, perhaps because they have been used too much and badly, become tiresome.

Smaller dining and living rooms need smaller tables, therefore different plates, bowls, vases and lamps. The cost of flowers plays its part. New materials used for furniture, floors, wall coverings or hangings influence the choice of all ornaments. Eating, drinking and smoking habits change and with them all the accessories. To design in the modern spirit does not mean lack of respect for our forefathers, who have since immemorial time accumulated for us and taught us knowledge of material, technique and design. No one, for example, has greater respect for the old masters than the most advanced modern painters.

What is the relation of craftsmanship to design? Many of the ceramic workers who can not create, and we all know that very few of us are so gifted, are often the best craftsmen. It is highly important that they, too, continue their work and that they keep on improving and teaching their technical knowledge. We will continue to admire them for their craftsmanship and their work will be valuable to persons who collect technical examples or copies of the antique. Others who prefer not to copy will go to the artist and combine his creative ingenuity with their craftsmanship. They will, by exhibiting their work or submitting it to manufacturers, be able to sell to shops of quality as well as become stylist for mass production. This possibility of styling will, of course, also be open to the artist who can both design with originality and execute his own work. He is the leader of his guild, the best teacher and the one to cross the bridge leading from the Applied to the Fine Arts. Only these two, the artist-worker and the individualist, will, therefore, have the chance to benefit by the expected new demand for ceramics.

Now what do we mean by good contemporary design? At present we are in one of the periods which frequently occur in art history, when simplification of design is essential. This has always happened after a period in which ornamentation and decoration had run riot, so we are in a purification wave just now. Many causes contribute to give this wave some permanence. Architecture has become functional and made the tenet popular that the object which purely fulfills its use best is the most beautiful. Mass Production with the necessity to make its production cheap tends to simplification. New materials and the new application of old ones permit simplicity without monotony. To the ceramic worker this means that form is the most essential, surface and color come second and ornamentation and decoration, if any, come last.

Our ideal today is classicism again. That is what the Germans call the use of the "Eternal Forms" without or with very little embellishment. We still, or again, like nothing better than the simple forms used by the Babylonians, the Egyptians, the Greeks and the early Chinese. To these forms we now add some of the newer shapes which have grown out of the machine age and the use of relatively newer materials such as glass and metal.

We dislike inconsistency in design and exclude all ornamentation and decoration, where it is not essential. Distributors to the more discriminating public, feel, of course, the trend of the demand and know what is difficult to supply. Strange to say there always

seems to be the greatest scarcity in the supply of the seemingly simplest objects and forms. It makes one think of the remarks of visitors in galleries when they see certain abstract paintings or a Brancusi sculpture—that any schoolboy could design them. Let them try.

The commercial shows of china, glassware, pottery and lamps dramatize the effort the manufacturer and salesman make to hide their lack of taste by over-decorating everything, by making their products look what they call beautiful and rich. It is almost impossible to find an object there in good taste. They will tell you that is what the public demands, but we believe it is all they can get, at least from that source. But a few large manufacturers in metal and ceramics have begun to use good modern designers to help them turn out a product which will satisfy the best contemporary taste. They will, undoubtedly, need a constant supply of new designers as soon as the demand will warrant it. As far as we know they have found out that the public will buy an object even though it is in good taste.

One should not look down on cheap mass production. Only this mass production if it continues its new policy, and all signs point that way, will raise the taste of the average man and woman. This will make it necessary for the individual or small shop worker to design still better, and to further increase his technical skill, so as to beat machine products. He is not a good artist if he is afraid of the machine.

BOOKS RECOMMENDED

Further information regarding these books may be obtained from the editorial offices of DESIGN.

ART AND INDUSTRY

by Herbert Read. Published by Harcourt, Brace and Co., New York.

The four sections of this book are most adequately treated by the author. The first section gives an historical summary of the changing concepts up to and including the advent of the machine; the second deals with the aspects of form as conditioned by mode of construction and material; the third treats on ornament and its relation to the machine-made product; the fourth is a suggested means for art education in an industrial age. Throughout the book there are numerous reproductions to illustrate the author's pertinent statements.

INDUSTRIAL DESIGN AND THE FUTURE

by Geoffrey Holme. Published by the Studio Publications, Inc. New York.

This book dealing with the problems involved in connection with design and industry is handled in a most capable manner by the author who is also the editor of *The International Studio*. It is divided into three sections. The first gives the personal point of view of the writer; the second is given over to the attitudes of producers, merchants, and designers; the third is a wealth of photographic material illustrating the new industrial movement.

HOW TO PACKAGE FOR PROFIT

by C. B. Larrabee. Published by Harper and Brothers, New York.

Set forth in this book are the various factors upon which successful packaging depends. The treatment is thorough in every respect and practical from the standpoint of the designer, merchandiser, and manufacturer. It offers valuable material for teachers and students who wish to see the problem from the commercial point of view. The book is convincingly illustrated.

THE AUTOBIOGRAPHY OF AN IDEA

by Louis H. Sullivan. Published by W. W. Norton and Co., Inc., New York.

Published in 1922 this lucid story of the birth and development of a personality has recently been reprinted by permission of the American Institute of Architects. It is a vivid book by the father of our new architecture, Louis Sullivan, who was the first to feel the need for new architectural forms from new materials, and for a new and growing culture.

RAMESES TO ROCKEFELLER

by Charles Harris Whitaker. Published by Random House, New York.

The author, formerly the editor of the *Journal of The American Institute of Architects*, has brought between the covers of this volume an inclusive view of architecture—almost from its inception to the present day. He treats the subject as a humanitarian problem rather than as an art form—starting from the pyramids and ending with Radio City. The book has many interesting illustrations.



MODERN DESIGN IN SWEDISLA

The skill with which the Swedish glass at Orrefors is engraved is in the hands of very young men who, although they have learned the craft from the older engravers, are more able at executing new designs.





ORREFORS GLASSWARE

That the glass at Orrefors has attained such excellence is perhaps due to the fact that the craft has continued to flourish and be perfected in a factory which has existed for over four hundred years. With the advent of Hald and Gate as directors, the designs were changed to identify themselves with changing conditions.



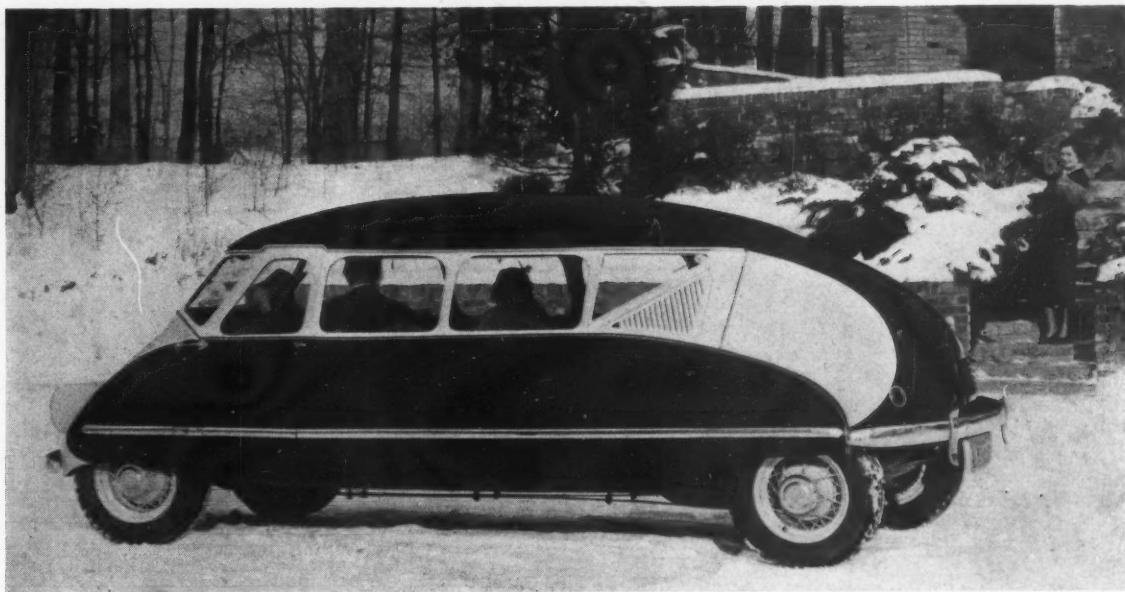


SWEDISH GLASS

Detail of figure from a vase of Orrefors Glass. The vigor and simplicity of this design are characteristic of the products of this noted plant.

THE SCARAB

The new stout car which has been called the scarab because of its odd exterior shape for which the designer points out some fundamental advantages.



AN ENTIRELY NEW TYPE AUTOMOBILE

An entirely new type of automobile which discards all previous traditions and conceptions generally used as the basis of car design, is announced by The Stout Engineering Laboratories, Dearborn, Michigan. This new car has been under development by Mr. Stout for several years and preliminary models have been undergoing actual road tests for the past two years.

According to the designer this new car marks the first real departure of the automobile from its classification as a development of the "horseless carriage" which initiated the present type of automobile design. The present location of the engine between shafts at the front of the car, and the seating position of the passengers in fixed seats placed across the vehicle are two very distinct indications of the descent of the modern automobile from the horse-drawn vehicle.

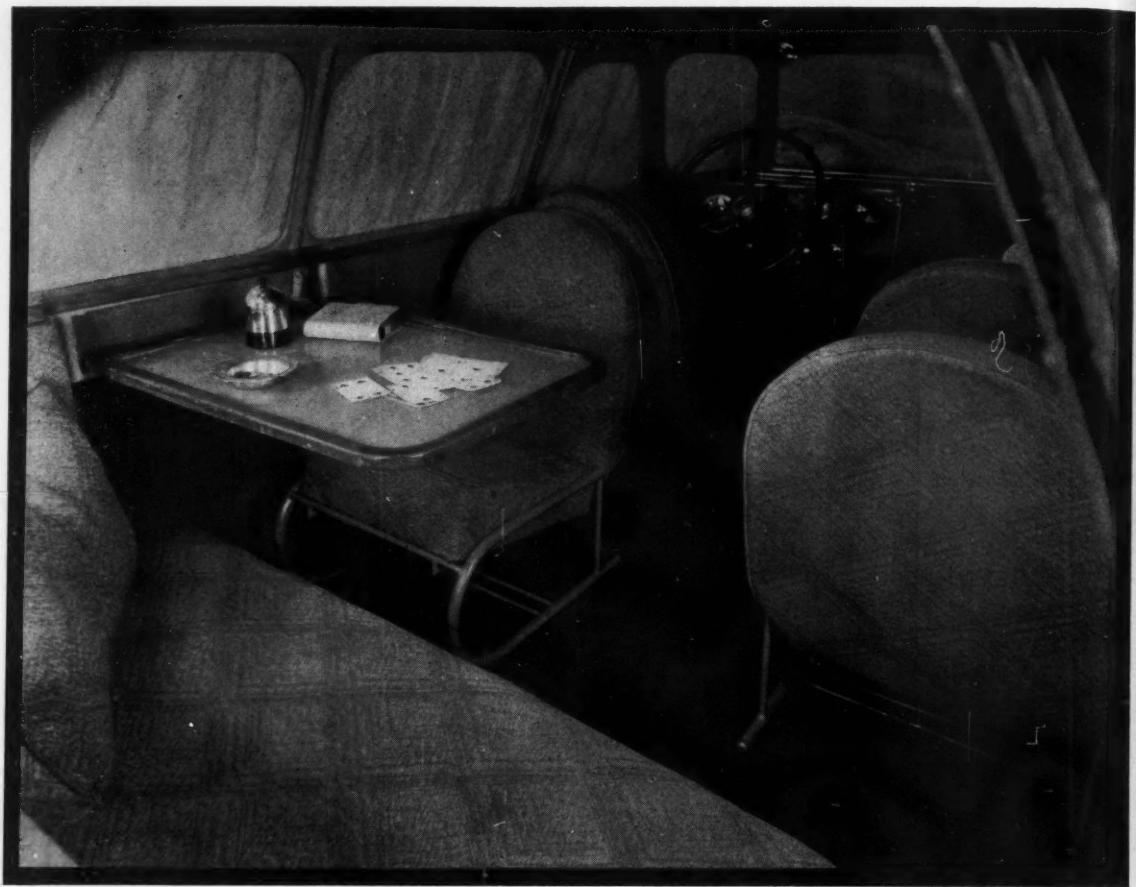
Not only these features but many other carryovers from horse days, such as the running boards, exterior fitted lamps and other accessories, have been eliminated from the new Stout car. This new vehicle is no longer in overall length than the present type of popular priced car and yet because of its design incorporates a tremendous gain in interior roominess and in addition is also claimed to have added superi-

ority in riding comfort and performance.

Because of its general shape the car has been tentatively named the Stout Scarab because of its resemblance in form to the classic Egyptian beetle. It is not streamlined in the sense usually used as a means of reducing drag at high speeds; but is shaped to facilitate easier steering in all directions of wind. It has been found by careful investigation that this is a far more important factor than generally realized, while gains in speed or fuel mileage as a result of streamlining in an automobile are negligible at usual road speeds.

To visualize the exterior appearance of the car all previous conceptions of an automobile must be discarded. There is no dividing line between body and chassis. The entire beetle-shaped structure is built upon a frame of alloy steel tube hoops, giving a tremendous safety-strength ratio. In this structural design Stout has employed his experience in the building of all-metal airplanes. The entire framework of the car is all based upon airplane stress analysis, plus crash research. Just as in airplane practice actual strength as well as crash strength in an emergency is developed to a high degree.

INSIDE THE SCARAB



Looking forward in car, showing the seats arranged in a typical manner for cross country travel. The ash tray stays on the table even when a curve is taken at high speed.

A big factor in the outside appearance of the car is the elimination of the useless running boards, which Stout contends are handed down to us from the days of the horse. The running board space is inside of the car instead of outside. It becomes a part of the floor of the car which is continuous across at the usual running board height. This provides greatly increased roominess inside. Although the roof is at the usual height there are five inches more headroom inside the car than with the conventional type.

The engine in this car is at the rear. It only takes up the space of the usual trunk rack. Being housed away in the tail of the beetle shape, the usual hood space up front—clear up to the point corresponding to the radiator ornament of the ordinary type of car—is available for passenger room.

On entering the door of this car the passenger is astounded by more room than he has ever seen in a motor car, regardless of its price or wheelbase. At the extreme front is the windshield. It is almost directly over the front wheels. Just below the wind-

shield is the instrument board. Back of this on the left is the driver's seat—large, comfortable and upholstered with plenty of room all around it and adjustable in all directions and to all angles, although fastened to the floor. Next to it on the right is a similar chair—luxurious and high-backed—but this is not even fastened to the floor and can be turned around to any direction or location, depending on the change of position the passenger desires.

Opposite the rear door, and just forward of the rear wheels, is a wide overstuffed cross seat almost like a lounge in its length and luxury. Behind the high back is a wide shelf for coats, hats, knick-knacks, magazines, etc. Between the front of this rear seat and the back of the front seats is the luxuriously carpeted room which we call the "interior" of the car, with two more upholstered chairs loose on the floor to be turned in any direction. The usual arrangement is with but two removable chairs, plus the driver's seat, plus the wide couch rear seat—a 5-passenger touring setup.

ANCIENT ART BECOMES INDUSTRY

Continued from page 32

ing needle, the artist scraping delicately the bright upper coat until the darker background appeared.

Soon after this, inspired perhaps by the French miniatures and by German engravings, they simply applied a dark ground coat which was covered with a white opaque enamel and additional colors were applied by brush.

There is one piece signed and dated 1503. From this school, some of our most beautiful examples of art enameling have come down to us. In many cases the colors are dazzling, especially the blues and by the generous use of gold. The glory of enameling as an artistic medium, and the glory of Limoges, reached the highest point during the life of Leonard Limosin, probably the greatest of all artists in enameling.

None of the Limoges artists attained the glory of Leonard Limosin. He was born in 1505, came to Paris in 1545, where he worked for Francis the First with the title of Enameler to the King. His immense output includes all sorts of objects ornamented with mythological scenes after the Italian manner. The most valuable enamels in the world are his twelve apostles, faithfully watched over in a little church in Chartres. His reputation was mainly assured, however, by his portraits. The decadence of the art of Limoges began about 1580 and was quite swift.

The transition from art to commerce came rapidly, and our next school of enameling, called Miniature, was perhaps improperly named that. It was simply the enameling of small commercial pieces by painting and was developed to its highest point about 1750 in Battersea, a suburb of London. The Battersea School concentrated on snuff-boxes and novelties.

We find the art developing more and more into industry as it was discovered that the material had great utilitarian value—that refrigerators could be lined and stoves could be finished, eliminating household work and improving the durability of those articles. But it is in the field of architecture, where friends predict its greatest opportunities.

Gradually the possibilities of additional use of color in architecture has brought more and more attention to ceramic products. Here we have an opportunity of combining beauty, color and utility on a large scale. In London, some years ago, I inspected a new building built there by the National Radiator Company. The exterior was black granite with a frieze of very beautiful enameled decorations, extending around the entire top of the building. This was Champlevé enamel on cast bronze, using very bright colors.

Our own architectural journals have given considerable publicity to the porcelain enameled metal plaques recently executed for Radio City. These are huge mural ornaments of circular design, eighteen feet in diameter. Each of the plaques is placed sixty feet above the sidewalk, forming a complete decorative

motif which artistically relieves the dead-wall expanse. They were made from sheet metal which was beaten and molded by hand before being covered with a richly beautifying and protective coat of enamel.

Mr. H. Edward Winter, a promising young American artist, schooled in enameling at Vienna, has produced results which no doubt will lead to a great extension of this idea in architectural ornamentation. Certainly there is a field for similar artistic products for use in schools, restaurants, public buildings, theatre lobbies and apartments.

Stuart Chase states that the homes of the well-to-do in our country are in violent contrast with those in Mexico. They are worse outside and better inside. In Mexico the eye follows the just proportions, the cleanliness, the blonder colors, and is at peace.

The great field of domestic housing today occupies a prominent place in all publications. It has been suggested that the Government might aid in building thousands of homes. The curse of any general production method of building homes lies in the possibility of entirely too much uniformity in appearance. This objection might be eliminated by using ceramic materials for exteriors and varying the color combination in such a way that they would eliminate monotony.

Very few people know the amount of research and development work being done in this field. At a Century of Progress, held in Chicago, the exhibition of new types of houses proved to be one of the great attractions. A number of the homes was finished in some product from the Ceramic Industry.

With the vision created by the possibilities for our Industry in an enormous domestic building program, we can forget enamel as an art object alone, and think of it as an artistic materials that can be used in large quantities in many different industries.

By and large, the groups in our industry are composed of craftsmen with artistic, rather than industrial, tendencies. Our perspective is spoiled by a close association with our materials in the shop, and we lose track of the possibilities of combining a great art with modern industrial products. We should be looking to that new profession, industrial designing.

The Porcelain Enameling Industry will soon be a good example of the revolution from old designs and old selling methods to new shapes, colors and beauty.

APOLOGY

In the April issue there were several errors for which we should like to apologize. The article, Contemporary French and Swedish Decorative Arts was signed Richard F. Bach. It should have read John Goldsmith Phillips. Credit should also have been given to the Metropolitan Museum of Art for the photograph of the Pennsylvania Dutch slipware plate shown on page 4. The pieces illustrated on page 34 were shown at the same museum during the recent Industrial Art Exhibition.

A NEW DEFINITION OF DESIGN

Continued from page 13

chine. They must be simple in shape and obtain beauty through geometric forms and rhythms.

Designs are now made by artists to be executed by the workmen on a machine. The machine has changed the high priced craftsman into a workman with the result that the designs made in this machine era must be made to fit the ability of the workman. For no longer is he a craftsman in his field. The resulting arts are no longer available only to a select few of the wealthy class who can afford to pay the high price, but are within the reach of the great mass of people. Designers must also meet the limitation set up by the machine which has caused the introduction of new styles and new patterns typical of machine art. With an understanding of the peculiarities and an insight into the possibilities of the machine he is in a position to create products which will be cheaper. This opens up vast fields of buyers and causes a larger output of machine-made articles. These are but a few of the elements which affect machine art. As consideration is given to them an entirely new era of design results.

In the midst of all this change in civilization, speed, and invention we find the designer who has, also, by a process of evolution changed so as to meet the many new demands confronting him. In the first place he is no longer supported by a rich patron who in return for the art objects created enables him to live a life steady and unencumbered by economic worries. Rather, he must enter the commercial world and sell his work to the manufacturer and in turn to the public. He gives up his former place in life, aloof and secure, to enter the uncertain commercial world. His resulting designs must reflect the spirit of the times, and express the forces which dominate our contemporary life; obviously these forces are not the same as those of fifty years ago. In the attempt to show a feeling for contemporary spirit the designer has become an eliminator of unnecessary ornamentation. Paul Frankl says, "In the effort to become more natural and simple the first objects to be discarded were those which were most frilly and carved with complicated designs. It is natural that the little bric-a-brac cabinets and the gilt furniture upholstered with tassels should have been the first to disappear. They are hardly expressions of our times. This evolution of design has had its effect on the resulting products. Articles which were once complicated, fully carved, over-embellished and had a personal character are now quite impersonal, severe in treatment and gain their effect from flat surfaces, sharp contrasts, angles and shadows."

Our mode of living has become so complex and so different from that of the past that the demands now faced by designers were never felt fifty or even twenty-five years ago. One of the demands now confronting him is that of health. Objects designed today must be made with consideration for public health

and safety. The zoning laws of large cities have had their effect on the designs of architecture. Fireproof buildings have caused the need for new designs for buildings. All steel automobiles with stream lines are the results of the demands for speed, safety and economy in automobiles. Science has led the way to new uses for sanitary materials in creating sanitary designs. The forms resulting from modern construction prevent the collection of dirt and simplify the job of keeping the object clean. Fireproof and dangerproof materials have been incorporated in objects in such a way that they now fulfill better the function they have to perform and their aesthetic qualities express something new.

Another force facing the designer is that of compression which has entered our lives in many forms. The modern automobile compresses eighty horse-power in a motor as small as a lamb. Food is compressed into cans and tablets, buildings are pressed together and for want of space shoot higher into the air. Studies indicate that homes are becoming smaller. The home itself, whether it belongs to rich, moderately well-to-do, or poor, has grown smaller. In many middle class houses and apartments the dining room, for instance, has disappeared either to be combined with the living room or to be replaced by an alcove. Few modern builders would include both a "sitting room" and a "parlor" in their house designs, as their predecessors habitually did a half a century or less ago. For most families, certainly most families in cities and towns, the importance of the dwelling place has diminished owing to the fact that there are more accessible outside diversions than used to exist.

The designs now being made for mass production must be made to fit the budget of the general public. Articles now have to be priced for a quick turnover. The designer is the only one who can solve this problem of reducing the cost of materials and still produce an article having aesthetic qualities to make it sell. Rhythm, economy of means and materials are the outstanding objectives of present day industrial products. The demand for economy includes economy in space, decoration, means and materials as well as price.

Designers must consider the life of the article they are to produce. Objects whose styles must change often may be bold and outstanding, but in other objects where the life has to be long the styles must be more conservative and must change in such a manner that a new style arrives when the life of the article is at an end or is nearing the end. Good examples of this are seen in the style of women's clothing, which must change seasonally for economic reasons. They are bold and daring and each new change is outstanding from the old. The case of the high priced automobile is another example. It must be used several years. The designs change slightly each year, until the normal life of the car is over when it is completely out of date. The length of life of the article will necessarily change the type of design and the materials used.

The enormous output of the machine combined with the ever increasing competition in industry has caused a need for new ideas of design in all commercial fields. It also has created a tendency to keep well planned objects within the buying range of the general public, allowing art to assume a universal place in everyday life. Charles R. Richards says, "The machine is becoming more and more a tool of artistic possibilities, because for the first time in its history it is being made to feel the demands of the consumer through economic pressure. These demands are being transmitted largely through the department stores, which have become extremely sensitive to the qualities of consumer demand. Through them the new demands have reached the producer, who by nature is the least sensitive member of the chain. This increasing power of the consumer is what is bringing to the manufacture the demand for the styler and the talented designer. Through competition new fields in the industrial world have been opened to the designer. Business leaders have welcomed him to their midst."

Experiments are showing that often, when articles are well designed they sell better than poorly designed articles of the same quality and price. One department store which has given much attention to styling tested its patrons' æsthetic sensibilities not long ago by putting on sale a line of goods in which the design was purposely pulled out of what was judged to be correct proportion. The price was the same as that charged for goods of similar grade, but was considered to be a better design. The badly designed goods did not sell. The majority of the customers instinctively, as it seemed, turned away from them. Such experiments are showing that the public is awakening and is demanding new ideas in design, that it appreciates more the principles of design and that people feel that they are getting more for their money when objects made with a consideration for function are presented to them. According to Sidney Blumenthal, the lectures and study courses in schools and colleges on the subject of the appreciation of art, the wider dissemination of the literature of art, the establishment of new centers of art education by the intelligent of our great museums and their traveling circuits are steadily injecting into the mentality of our public an appreciation of the beautiful.

INDUSTRIAL ART EXHIBIT

Continued from page 16

room setting,—a general feeling of decorative unity is obvious in all the related displays. The home has been thoroughly planned for efficiency and final unity of effect as well as for functional beauty. Even in the kitchen the need for proper industrial design has been seen, and units are so designed that each harmonizes and fits in with the varied equipment already established. The design of the exposition as a whole was managed by Harvey Wiley Corbett. The general decoration was in the hands of Virginia Hamill.

The essential difference between this exhibit of industrial arts and many of those which have gone before is the fact that this showing is dedicated to the average man with the average amount of money to spend who wants nevertheless to have livable, attractive furnishings for his home, pleasure and business surroundings. Several of the women's magazines of national circulation have sponsored special room settings, and these prove that the need for a small expenditure does not limit the possibilities of acquiring attractive furnishings. Several department stores and furniture companies have also arranged special exhibits, studio living rooms, ideally arranged dining scenes, practical kitchens, et cetera. Various new decorative materials are used, and many original redesigning plans have been carried out to the vast improvement of old units. Plastics and metals have been utilized in many unexpected corners and full rooms of the modern homes suggested.

Smaller decorative details and accessories are shown as well. Silver, table linens, potteries of new and smart styling, wall coverings, fabrics for upholstery, rugs, draperies in durable and beautiful textiles are seen throughout. Compact units for the modern homesetting are attracting the attention of student designers, manufacturers, and the public at large as typified by the average consumer, who is appearing at these displays in ever increasing numbers, and upon whose approval expressed in purchases the future of art in industry depends.

Several of the display stands show a fine appreciation of the basic needs of design. The thin metallic tubular arrangements combined with transparent or opaque glass in small shelves or larger table effects are especially well suited for the display of small articles and accessories whether for costume or the home.

A very effective arrangement of new modern furniture units, compactly planned and grouped is to be seen in a penthouse studio designed for living either in a metropolis or a small home in the country. A combination of a twin studio divan with back and side bookshelves lines one wall with three separate units which together create a finished room effect of built-in furniture with the added advantage of movability. The coloring in this room is blue and grey with accents of bright red for contrast and relief. Walls are not overcrowded, chairs are kept simple and comfortable, and useful unit is a combined storage and desk space.

In the section devoted to metals there are many outstanding exhibits. Illustrated is a new cocktail set of modern design by Alfons Bach, executed by Keystone Silver. The sturdy, usable pieces are simple and attractive. The circle motif of the goblets is repeated in the shaker and in the tray handles.

The tremendous Forum display has been crowded since its opening, and the success of these yearly ventures proves the constant interest of the public in good modern design.

OWATONNA ART EDUCATION PROJECT SUMMER CLASSES FOR TEACHERS JUNE 18 TO JULY 27, 1935

As a part of its regular summer quarter the University of Minnesota will offer a group of courses for teachers at Owatonna, Minnesota. These courses are offered in connection with the Owatonna Art Education Project and are open to teachers of experience or students who have completed their preparation for teaching. They are intended primarily for teachers in the grades and high school who have not had special preparation in art. However, teachers and supervisors of art will also find the courses useful and they will have the opportunity to become acquainted with the Owatonna Project. The courses will carry university credit for those who matriculate as regular students by meeting the University's entrance requirements, and will in all other ways be regarded as regular university offerings.

The Owatonna Art Education Project is an experimental investigation designed to develop a program of art instruction related to the needs of contemporary American life. Its basic assumption is that art is a way of life for all people and that this fact should be reflected in the art curriculum in the schools and in the methods of instruction employed. It is implicit in this assumption that the teaching of art cannot be delegated to special teachers in the public schools but they must be shared by all teachers of all subjects. The Project assumes that an understanding of art by all teachers is a necessary condition for the proper development of the teaching of art in the public schools. It is the purpose of the Project to develop ways by which teachers may become acquainted with art ideas and interests and may make use of such ideas in the regular work of the school.

The courses for teachers will be related to a group of classes for pupils and adults which will be offered in Owatonna during the period of the summer session. Edwin Ziegfeld, resident director of the Owatonna Art Education Project, will be in charge. Other members of the staff are Ray Faulkner, instructor of Art, University of Minnesota; Barbara Smith and Helen Almars.

SCHOOL OF DESIGN SPONSORS SUMMER TRIP TO JAPAN

The Rhode Island School of Design will sponsor an unusual summer school during the coming summer for artists and those interested in art. Dana Prescott Vaughan, dean of the school, will be the leader of a group which will go to Japan to study the culture of the Far East and learn from native instructors such fascinating arts and crafts as ivory carving, wood-cut printing in Far Eastern technic, cloisonne making and flower arrangement.

The trip has been arranged and will be managed by Sogo Matsumoto, director of the Far Eastern Culture Center and a graduate of Yale. Mr. Matsumoto has close connections with educators and officials in Japan

which will make it possible to have many unusual facilities available which Japan offers in its unique position in the field of arts and crafts.

The trip will take in a period of approximately two months and will include study under Japanese professors, artists and skilled craftsmen, demonstrations of many other arts and crafts, visits to libraries, schools, studios, museums and trips to various parts of Japan.

The group, expected to include 50 from Columbia University, eastern States and the West Coast, will sail from Los Angeles June 22, on the S. S. President Wilson.

INTERNATIONAL ART EDUCATION CONGRESS

The seventh International Congress for Art Education will meet this summer in Brussels, Belgium, August 9-16. It should be of vital interest to all of those who are able to take the trip. We appeal to all persons interested to co-operate in making the American participation in the Congress significant. Two things particularly are to be considered: (1) a representative delegation of American members (2) participation in the program either through personal attendance or by submitting worthwhile papers on topics which are to be discussed.

Among the general questions to be discussed are:

A.—General Questions

1. What is the relation between the general development of intelligence in young pupils and the evolution of their artistic aptitude?
 - (a) How do the newer educational ideas apply to art teaching? (In the matter of observation, mode of expression, etc.)
 - (b) Does the creative faculty show any special modification among young people approaching adolescence?
2. How may the educational, aesthetic and practical aims be pursued concurrently in art teaching?
3. In view of the tendency to use newly invented pigments, how does that affect the teaching of colour to young pupils?

B.—Special Questions

1. What is the role of manual training in relation to art teaching?
2. What is the influence of contemporary decorative art upon the teaching of decorative composition?
3. The history of art as a school subject: how may it concern the art teacher?
4. In general education, what contribution may be made by the instruction in mechanical drawing to the course in mathematics?
5. What are the actual conditions of professional training and the status of the art teacher in different countries?

For further information regarding the International Art Congress, address Mr. A. G. Pelikan, U. S. Chairman, American Delegation, Milwaukee Art Institute, Milwaukee.

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